CALIFORNIA
OIL WORLD
and Petroleum Industry

PUBLISHED TWICE A MONTH — ENGINEERING — TECHNOLOGY — LATEST NEWS

SECOND ISSUE
JULY 1941
VOL. 34 NO. 14
WHOLE NO. 1589

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California Oil World and Petroleum Industry is published twice a month at 1009 in the 939 So. Broadway Bldg., Los Angeles, California. Entered as Second-class Matter January 1, 1937, at the post office at Los Angeles, California, under the Act of March 3, 1879. Subscription price $1 per year in U. S. and Possessions, $2 in foreign countries, including Canada. Member ofthe Audit Bureau of Circulations.

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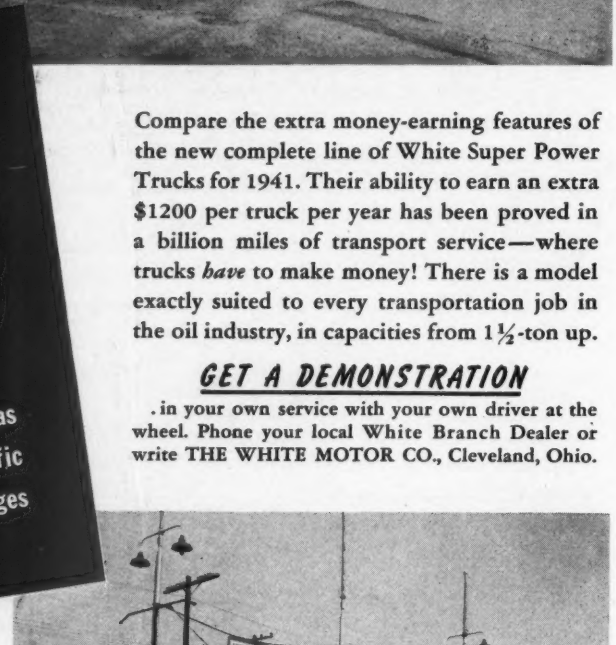

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Highlights of California News and Views

Coordinator Names District Groups

Raisin City Well Yet Uncompleted

Shell Oil Co.'s Santa Ana & Fresno Land No. 1-19, second well in the Raisin City field in Fresno county, is still attempting to complete.

Located in sec. 19, 15-18, 30 miles northeast of the nearest producing wells in the Coalinga field, the project is bottomed at 5049 ft. and is attempting to produce black oil sands found at 5022 ft. High pressure gas sands cored from 5004 to 5017 ft. are behind the 7-in. casing cemented at 5022 ft.

Initial liner landed in this well contained 80 mesh perforation and proved too coarse for the fine grained sand bodies. Smaller mesh liners were tried and as a final resort a special wire wrapped 20 mesh liner was run.

After washing the special screen with a light distillate preparation, the well was swabbed with only a few heads resulting. After pulling this, the fifth liner, the hole was conditioned and tested barefoot with a formation tester. As only drilling fluid was recovered, it was assumed that the formation had been thoroughly mudded off during the liner pulling and running operations. The Company has resorted to the good old fashioned practice of bailing to clean out the hole before landing another liner.

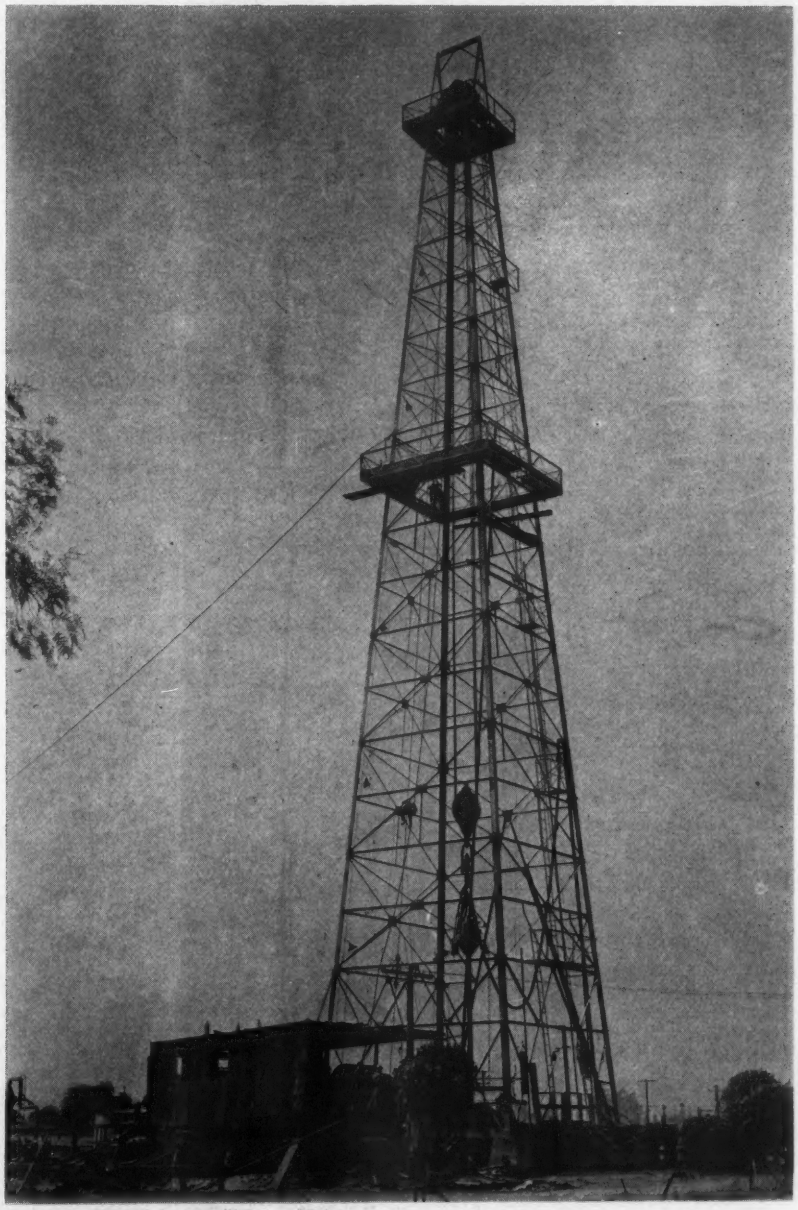
Nine miles to the south near the Burrel Station, General Petroleum Corp. was last reported coring ahead from 6259 ft. where a formation test proved wet. The well is located in sec. 2, 17-18.

Hogan Completes Inglewood Well

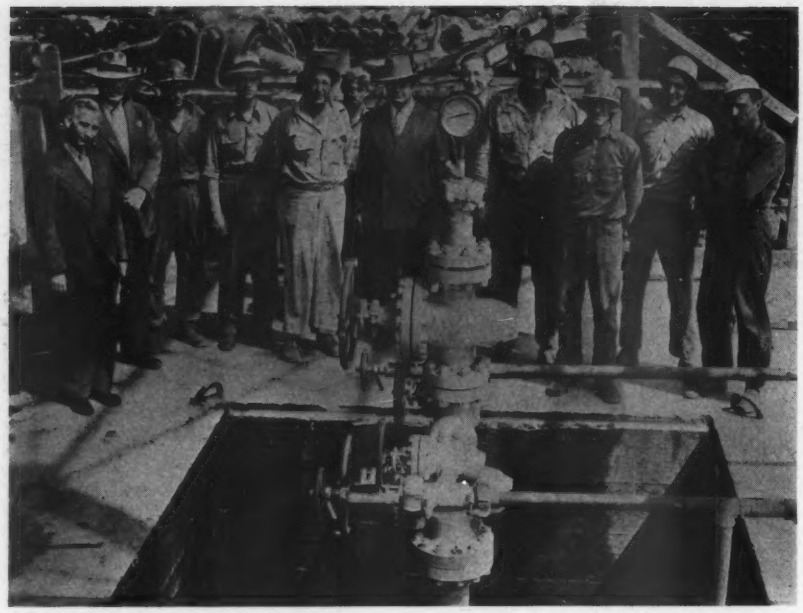
Hogan Petroleum Co. added another good well to the list of big producers in the deep zone at the north end of the Inglewood field when it finished Machado No. 1A at 8175 ft. With 222 ft. open to bottom, the well came in flowing at an initial rate of 1546 bbls. a day through restricted beans. Gas production and gravity of the oil are lower than wells to the northeast, the gas-oil ratio here approximating 1000 cu. ft. per bbl. and the gravity testing 31.5 degrees, API.

While attempting to deepen Federal Oil Co. lost a mill in Smith No. 2, and, leaving the fish in the hole, rewashed perforations and again tried to complete. At last reports the well was flowing by heads, the yield unestimated.

Next to be completed will be the Oscar Howard-Jergins Oil Co. No. 1 which is making its final footage after setting casing at 7973 ft. Following soon will be R. R. Bush Oil Co. Smith No. 1, now testing casing



Lebow has a smoothly running spark plug rig making hole on South Main St.



Jefferson Oil Co.'s well on Ron Smith's home site was the second big producer at the north end of the Inglewood field. Left to right are Harold E. Prudhon, attorney; H. C. Smith, president of H. C. Smith Oil Tool Co.; Jimmy Wadell, Francis E. Gober, W. L. McGee, Earl Puttoff, Sam Brooks, president of S. M. Brooks Drilling Co., Ron C. Smith of Smith Oil Tools; W. L. Miller, Tom Parcell, F. E. Hatfield, and W. C. Barger.

cemented at 8193 ft. Bush's Merchants No. 1, bottomed at 8840 ft., is suffering from loss of circulation while trying to recover a drill collar fish.

The Texas Co. is drilling R. C. Smith No. 8 below 2000 ft. while Tide Water Associated Oil Co. is rigging up Vickers No. 70 and Standard Oil Co. is preparing to build a derrick for Vickers No. 2-12.

Royalty Service Corp. abandoned Marlow-Burns No. 1, outpost well on "57 Hill", at 8787 ft., after finding the Miocene top at the extremely low level of 8760 ft.

Hathaway to Drill Deep Oak Canyon Well

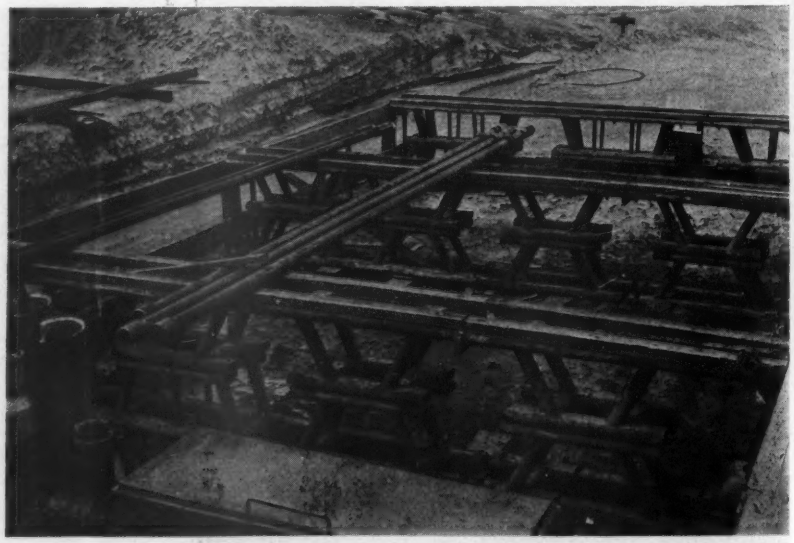
One location south of shallow Ram No. 1 and more than half a mile southwest of Western Gulf Oil Co.'s deep discovery well, Lechler No. 2, Hathaway Co. is preparing to drill Ram No. 2 to the 6900 ft. zone at Oak Canyon. As this structure is one of the broadest in the Castaic region, it is probable that the Hathaway well will find the zone at only slightly greater depth than Western Gulf.

With Lechler No. 2 beaned back to 175 bbls. a day through a 12/64 in. orifice, Western Gulf Oil Co. is formulating plans for another well the location of which has not been fully determined but which will probably be on the Wickham permit to the east. The field's three wells, two shallow and one deep, are all in sec. 31,5-17 approximately six miles northwest of Castaic Junction.

The history of Lechler No. 2 reads like a movie script. Though located higher structurally than No. 1, it found the upper sand too poor to test. The hole was then carried to 6089 ft. where drilling was suspended a few days while company officials considered the advisability of abandoning. This proved the turning point in the well's career as showings began to appear as soon as drilling was resumed. At 6435 ft. a body of hard, tight oil sand was entered which carried to 6569 ft. A 30-minute formation test of the interval recovered 12 bbls. of 22 gravity oil and one barrel of salt water. Drilling was continued to 7107 ft. where a test was made of a second sand topped at 6920 ft. which resulted in a strong gas blow and the recovery of 15 bbls. of 28.5 gravity oil and 19 bbls. of salt water. No further oil sands were found to 7178 ft. and the hole was plugged by stages to 6940 ft. where tests showed the zone to be dry. Completed at that level with 7 in. casing cemented at 6889 ft., the well came in flowing 800 bbls. a day of 31.5 gravity clean oil to achieve one of the major discoveries of the year.

Salvage Fails on Anderson Wildcat

With the lease, rig and equipment cleaned up after the spectacular blow out, Robert S. Lytle, Operator failed to salvage the hole in Anderson No. 1 at the corner of Western Ave. and Imperial Highway.



Pipe platforms at Honolulu's deep Buena Vista Hills test look like a swell idea.

Before you complete your present well—consider the advantages of

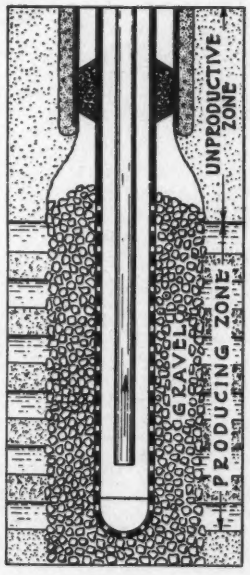
Gravel Packing by Circulation

OIL PRODUCTION from unconsolidated and fine sands presents certain difficulties, including sand cutting of screens or perforated liners, the sanding up of flowing wells, and inordinate wear on pumping equipment due to the abrasive action of the sand carried by the oil.

Producers who face this problem will find that gravel packing by circulation offers protection with many practical advantages.

Only by this method can the thickness and character of the gravel pack be varied to match the character of the sand and oil encountered. The gravel pack, through its contact with the sand, holds it in place and prevents its movement.

No lower cost method as fully effective has as yet been devised. The need for expensive screens and liners is eliminated. If ever necessary, the ordinary perforated liner used in this method could readily and easily be extracted and replaced.



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Oil Coordinator Names District Groups

The following statement has been released by the Office of the Petroleum Coordinator for National Defense:

Appointments to membership on district committees selected from nominations submitted by the petroleum industry, "to advise and consult with me and with the Deputy Coordinator on matters relating to the proper coordination of the activities of the petroleum industry for national defense" was announced by Harold L. Ickes, Petroleum Coordinator for National Defense.

These committees—four in number in each of five districts which together include the entire nation—were appointed for the production, refining, transportation and marketing branches of the petroleum industry in such districts.

The Petroleum Coordinator also announced the appointment of a General District Committee for each district, consisting of a General Chairman and the chairmen of each of the four district functional committees.

As originally contemplated each of the functional committees was to consist of twelve members, but the Coordinator indicated that only ten were to be designated at this time.

In explaining this departure from the original plan Coordinator Ickes said: "I recognize both the necessity and difficulty of selecting competent, experienced and completely representative committees to cope with the enormously important tasks that lie ahead. It has therefore seemed wise not to foreclose the appointment of additional commmittee members within the near future in the light of a clearer appraisal of the local situation in each district and a more definite crystallization of industry opinion.

"This is particularly true in the producing and marketing branches of the industry where, because of the numbers engaged, there is as yet no reasonable unanimity of opinion as to those who may be deemed representative of the many different interests in these fields. I shall expect both the industry and the committees as presently constituted to give this subject immediate consideration"

Branch Offices Established

The Office of the Petroleum Coordinator released the following on July 17, 1941:

The selection of five cities as headquarters of the branch offices to be established by the Office of the Petroleum Coordinator was announced today.

They are New York, Chicago, Denver, Houston, and Los Angeles.

The Coordinator, Harold L. Ickes, said that the staff to be located in each office would exercise immediate jurisdiction over its region subject to the Washington headquarters office.

The New York Office is located in the Eastern region, consisting of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Delaware,

A. L. WEIL

Maryland, Virginia, West Virginia, North Carolina, South Carolina, Georgia, and Florida.

The Chicago Office is located in the Mid-western district, consisting of Ohio, Kentucky, Tennessee, Indiana, Michigan, Illinois, Wisconsin, Minnesota, Iowa, Missouri, Oklahoma, Kansas, Nebraska, South Dakota, and North Dakota.

The Houston Office is in the Gulf district, consisting of Alabama, Mississippi, Louisiana, Arkansas, Texas, and New Mexico.

The Denver Office is in the Rocky Mountain district, consisting of Montana, Wyoming, Colorado, Utah, Idaho.

Los Angeles is in the Pacific Coast district, consisting of Arizona, California, Nevada, Oregon, and Washington.

These districts correspond to the areas for which industry committees were recently appointed and the offices designated will be used as headquarters not only for the district staffs but also for the district industry committees.

Staff appointments for the district offices will be made shortly.

District 5—(Arizona, California, Nevada, Oregon and Washington)

A. L. Weil, chairman, president General Petroleum Corp., Los Angeles, California.

W. L. Stewart, Vice-President, Union Oil Company of California, Union Oil Building, Los Angeles, California.

C. S. Jones, President, Richfield Oil Corporation, 555 South Flower Street, Los Angeles, California.

C. S. Beesemyer, Vice-President, Gilmore Oil Company, 2423 East 28th Street, Los Angeles, California.

Production Committee

E. E. Pyles, Chairman, Vice-President, Hancock Oil Company, Long Beach California.

W. M. Keck, Jr., Vice-President, Superior Oil Company, Edison Building, Los Angeles, California.

Laurence Vander Leck, Vice-President, Fullerton Oil Company, Security Building, Los Angeles, California.

L. L. Aubert, General Manager, Bankline Oil Company, Los Angeles, California.

A. D. Mitchell, Independent Operator, 2941 Cherry Avenue, Long Beach, Calif.

L. A. Cranson, Vice-President, Honolulu Oil Corporation, 215 Market Street, San Francisco, California.

F. S. Bryant, Director, Standard Oil Company of California, San Francisco, Calif.

L. P. St. Clair, Oil Administrator, California Conservation Committee, Subway Terminal Building, Los Angeles, California.

E. F. Davis, Vice-President, Shell Oil Company, Shell Building, Los Angeles, California.

R. E. Collom, Vice-President, Continental Oil Company, 601 W. 5th Street, Los Angeles, California.

Refining Committee

W. L. Stewart, Chairman, Vice-President, Union Oil Company of California, Union Oil Building, Los Angeles, California.

L. R. Holmes, Vice-President, The Texas Company (California) 929 South Broadway, Los Angeles, California.

J. L. Hanna, Vice-President, Standard Oil Company of California, San Francisco, California.

O. C. Field, President, O. C. Field Gasoline Corporation, 944 Wilshire Boulevard, Los Angeles, California.

H. S. Rothschild, President, Rothschild Oil Company, Santa Fe Springs, Calif.

E. V. McKenzie, President, Mohawk Petroleum Company, San Francisco, Calif.

F. S. Clulow, Vice-President, Shell Oil Company, Inc., Shell Building, San Francisco, California.

L. F. Bayer, Vice-President, Tide Water Associated Oil Company, 79 New Montgomery Street, San Francisco, California.

Maurice A. Machris, Vice-President, Wilshire Oil Company, 1206 Maple Avenue, Los Angeles, California.

Transportation Committee

C. S. Jones, Chairman, President, Richfield Oil Corporation, 555 South Flower St., Los Angeles, California.

C. P. Watson, Vice-President, Sea-

(Continued on Page 34)

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Some Factors Influencing the Life of Wooden Cooling Towers

C. N. G. A. Paper
July Meeting

By A. R. Moberg
Moberg Laboratories, Los Angeles.

For a number of years the petroleum industry has been endeavoring to condition water in cooling systems so as to prevent scale in the condensing equipment and piping as well as in the cylinder heads of gas engines, etc. Various methods of softening water, acidifying water or otherwise treating water for this purpose have been used with varying degrees of success. During this concentrated effort to prevent scale formation in the condensing equipment little or no attention has been paid to the effect that water might have upon the cooling structure itself. Within the last year or so, however, a few rather alarming conditions have come to light which have suddenly forced upon the industry the knowledge that while we

Fig. 1

might have been paying a great deal of attention to our condensing equipment, our cooling towers, in some instances at least, had suffered sadly indeed.

The sudden failure of a few cooling towers that had a life of only a matter of 3 or 4 years brought into startling relief a condition which had been passed over with scarcely a thought. This condition can be described as a gradual decomposition of the wood structure, this decomposition evidencing itself by an apparent rotting of the lumber which seemingly extracted the lignin and cellulose products leaving the wood in long, stringy fibres and rendering the whole mass so porous that it was almost impossible to hold nails or other hardware in the lumber. The lumber in time becomes so decomposed as to lose virtually all of its tensile strength.

Figure 1 shows a cooling tower in the first stages of this decomposition. Figure 2 shows another tower that is slightly

Figure 2

worse and where the decomposition has spread further. Figures 3 and 4 show this condition in the advanced stages. Note the fact that in figure 4 some of the wood slats have been completely eaten in two. Note particularly the figure 5 where the lumber has taken on the appearance of a frayed rope. Figure 6 shows the same phenomena progressing under deposits of salts that have accumulated on the outsides of the louvres. In this particular case, the continuously wet areas were perfectly clean and sound. These illustrations will show some of the effects and the ultimate results can very well be left to the imagination.

Naturally, the cooling tower industry became alarmed and sought to determine the cause and correction of this phenomena. The author being intimately associated with cooling water conditioning was equally concerned. After a number of conferences it was agreed that the author, in conjunction with the Fluor Corporation and some of the producers of redwood lumber, would conduct an investigation to determine the cause and correction of this phenomena.

The very nature of this phenomena indicated that the decomposition was more or less due to the extraction of lignin and so the name delignification was attached to the phenomena as described in the preceding paragraphs.

The first step was to obtain practical field data as to the extent of the difficulty and all surrounding and supporting data that might be required in a determination of its cause. To be certain that the phenomena and conditions were not merely a local situation the survey covered scattered points throughout the Pacific Coast area and the Mid-Continent area and covered every kind of lumber ordinarily used in cooling tower construction. Approximately 500 cooling towers were inspected and complete data compiled on them.

A preliminary survey readily indicated

Fig. 3

that the phenomena was not local nor was it restricted to any particular kind of lumber nor any manufacturer of cooling tower equipment. This fact, plus the chemistry involved, indicated very plainly that we would have to look to the water to find out just exactly what the cause was.

A preliminary study of the chemistry involved indicated the possibility that sodium carbonate might be the basic factor in the causation of delignification. As the reports on cooling towers began to accumulate the correctness of this theory became more and more evident. It was, therefore, decided to supplement

the field work by a series of laboratory tests.

The first laboratory test consisted of weighing up samples of California redwood of approximately the same weight and size. Each sample was dried in an oven at 95° C. for 48 hours before weighing. The samples were then placed in solutions of varying concentrations of various salts and allowed to steep for 60 days after which the samples of wood were removed from the solution and thoroughly washed in distilled water which was returned to the original solution. The samples were again dried at 95° C. for 48 hours and weighed. The solutions were subjected to analysis and all tannins, lignins and cellulose products were extracted and dried and weighed. Within the limits of error the weights of the extracted organic compounds equalled the loss in weight of the pieces of lumber. Table number 1 gives the data of some of these tests.

Table No. 1

Sample	Solution	pH	Extraction Grams	Loss in Weight
1	1000 ppm Na_2CO_3	10.94	1.9498	1.16%
2	3000 ppm Na_2CO_3	10.94	2.0815	1.24%
3	6000 ppm Na_2CO_3	10.95	2.1872	1.46%
4	9000 ppm Na_2CO_3	10.95	2.2645	1.56%
5	12000 ppm Na_2CO_3	10.95	2.3345	1.64%
6	15000 ppm Na_2CO_3	10.95	2.6792	1.89%
7	18000 ppm Na_2CO_3	10.95	3.3485	2.02%
8	36000 ppm Na_2CO_3	10.95	4.2005	2.84%
9	36000 ppm NaCl	7.49	0.7770	0.21%
10	36000 ppm Na_2SO_4 $CaSO_4$	7.51	0.5128	0.18%
11	36000 ppm $MgSO_4$ NaCl	7.2	0.4165	0.15%
12	36000 ppm $CaSO_4$ $MgSO_4$ NaCl	7.4	0.3210	0.11%
13	24000 ppm $CaSO_4$ plus $MgSO_4$ H_2SO_4	5.01	2.1732	1.22%
14	H_2O plus H_2SO_4	4.50	2.2775	1.48%
15	24000 ppm mixed salts plus H_2SO_4	7.20	0.0290	0.08%

The purpose of the foregoing test was to determine the relative effects of varying concentrations of sodium carbonate and other salts. Samples 13 and 14 were made in an endeavor to determine the effect of excess acidity while sample 15 was run in an effort to determine the loss under what, theoretically, would be ideal operating conditions. This theoretical ideal was based on the hypothesis that the causation of delignfication was sodium carbonate. At the same time it was obviously necessary to produce a neutral water that would not allow corrosion on the condensing equipment, and so an optimum pH of 7.2 was chosen.

While it is true that ordinarily we would never obtain as high as 36,000 ppm of solids in an actual cooling tower water, it is also true that such concentrations or even higher concentrations might be obtained at localized points where spray water was allowed to build up extremely high concentrations of salts at those points. This was aptly illustrated in figure 6. In other words, the samples 1, 2, 3 and 4 represent possible solutions and conditions on continuously wet areas whereas samples 8, 9, 10, 11 and 12 were used to illustrate what might occur at intermittently wet and dry areas where high concentrations of salts could occur.

From this table it is plain that the higher the concentration of sodium carbonate the more rapid is delignification. It is also evident that high concentrations of sodium chloride, sodium sulphate, magnesium sulphate and calcium sulphate have comparatively little effect on the wood structure. Sample 13 indicates quite plainly that chloride and sulphate salts do not inhibit the normal action of sodium carbonate. It is also evident that extremely low pH obtained by excessive use of acid is injurious to the lumber but to a lesser extent than is sodium carbonate.

Table No. 2

Sample	Solution	pH	% Loss Cypress	% Loss Yellow Pine
1	1000 ppm Na_2CO_3	10.94	1.32%	1.46%
2	3000 ppm Na_2CO_3	10.94	1.38%	1.53%
3	6000 ppm Na_2CO	10.95	1.52%	1.66%
4	9000 ppm Na_2CO_3	10.95	1.69%	1.84%
5	12000 ppm Na_2CO_3	10.95	1.76%	2.09%
6	15000 ppm Na_2CO_3	10.95	2.02%	2.29%
7	18000 ppm Na_2CO_3	10.95	2.11%	2.48%
8	36000 ppm Na_2CO_3	10.95	2.97%	3.23%
9	36000 ppm NaCl	7.49	0.22%	0.42%
10	36000 ppm Na_2SO_3 $CaSO_4$	7.51	0.17%	0.39%
11	36000 ppm $MgSO_4$ NaCl	7.2	0.16%	0.39%
12	36000 ppm $CaSO_4$ $MgSO_4$ NaCl	7.4	0.09%	0.38%
13	24000 ppm $CaSO_4$ plus $MgSO_4$ H_2SO_4	5.01	1.20%	1.99%
14	H_2O plus H_2SO_4	4.50	1.53%	2.06%
15	24000 ppm mixed salts plus H_2SO_4	7.20	0.09%	0.32%

To prove conclusively that pH is not the entire criterion of delignification progression, note that the pH in all samples 1 to 8 was exactly the same and still the rate of delignification was a variable. This would indicate that while pH might be an indication of the delignification tendency it is not the sole answer since a water having a pH of 8.8, for illustration, might concentrate at an intermittently wet and dry area and ultimately produce a high pH at that point and a high concentration of sodium carbonate.

Table number 2 gives the results in the same series of tests on both cypress and yellow pine. It is admitted that neither of these lumbers was particularly picked for cooling tower work although number 1 clear heart lumber was used in both cases. At the same time it is entirely possible that other samples of either cypress or pine, or for that matter, of redwood, might show better or worse results as far as delignification is concerned. At the same time it is interesting to note that the same general tendency under varying water conditions is evidenced on all of these lumbers.

A careful analysis of the cooling tower surveys illustrates exactly the same results as were obtained on the laboratory samples. In no case was any delignification noted on the actual survey unless sodium carbonate was present in the water or had been present at sometime in the past or unless excess acid was or had been present. As nearly as could be de-

termined by observation, the degree of delignification in each case was in direct ratio to the concentration of sodium carbonate or acid. Inasmuch as continuous use of acid water would corrode both piping and condensing equipment, such conditions are never allowed to exist for long and so the data obtainable from excessive acid use is rather incomplete. On the other hand, the sodium carbonate does no damage to piping or condensing equipment with the exception of

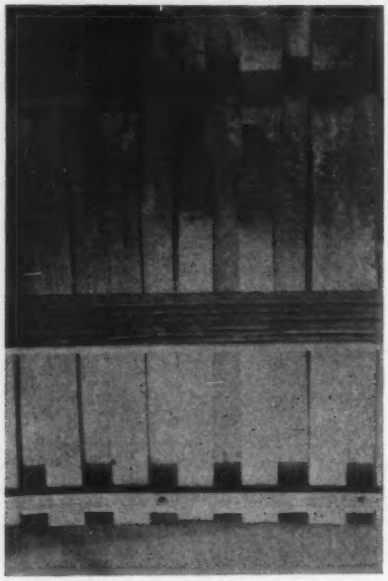


Figure 4

certain zinc and brass alloys and consequently highly alkaline conditions have been allowed to exist.

Possibly one of the most outstanding illustrations that could be given would be the data sheets covering our survey No. 125 and No. 130. Since the information was confidential we have deleted the names and addresses. Sufficient to say that both towers are in the same plant and use the same water. Both towers were made by the same company and are of the same type. The one outstanding difference is that the tower in survey No. 130 has had virtually no sodium carbonate whereas the other tower has averaged approximately 6,500 ppm. of sodium carbonate.

In spite of the fact that No. 130 tower was built in 1935 it is still in almost perfect condition whereas the tower in No. 125 is almost a total loss even though it was built 3 years later. Probably no more graphic illustration of the ravages of sodium carbonate on cooling tower structures could be obtained.

In considering the effects of sodium carbonate we must bear in mind that this salt is obtained by breaking down of sodium bi-carbonate under the influence of heat. It is, therefore, apparent that the higher the temperature the more rapid will be the conversion from sodium bi-carbonate to sodium carbonate. It must also be borne in mind that on the intermittently wet and dry areas, conversion to sodium carbonate may be obtained regardless of the temperature of the water itself. If sodium bi-carbonate is present in any amount in the raw water any tendency toward delignification will be varied due to the varying effects of temperature and possibilities of concentration on intermittently wet and dry areas.

From the mass of data set forth in this report and obtained from the surveys mentioned, it is evident that delignification is caused directly by sodium carbonate or hydroxide combining with the lignins, tannins and cellulose products of the lumber. It is further evident that excessive acidity can cause the same difficulty although such conditions are unlikely since the corrosive tendency produced would injure the condensing equipment. Low concentrations of sodium carbonate are not particularly injurious to wood structures that remain continuously wet. Sodium bi-carbonate of itself has little effect in the causation of delignification. Concentrations of other salts have little effect on delignification. High concentrations of sodium carbonate have a very definite effect on continuously wet areas. Since high concentrations of sodium carbonate increase the pH of the water it might be stated that pH has some indication of the tendency toward delignification of continuously wet areas.

Since sodium bi-carbonate can concentrate on intermittently wet and dry areas and form normal sodium carbonate in the circulating water it is apparent that

Figure 5

any sodium bi-carbonate may be injurious to intermittently wet and dry areas. Manifestly the higher the concentration of sodium bi-carbonate the greater will be the tendency to concentrate at such areas and produce normal sodium carbonate.

We might, therefore, state that the one definite and certain way of preventing delignification is to eliminate all sodium bi-carbonate and sodium carbonate from the circulating water. At the same time

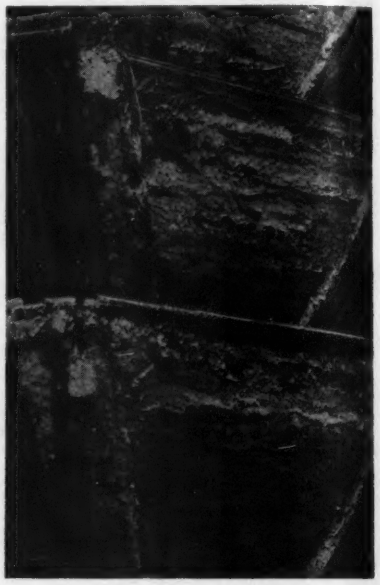


Figure 6

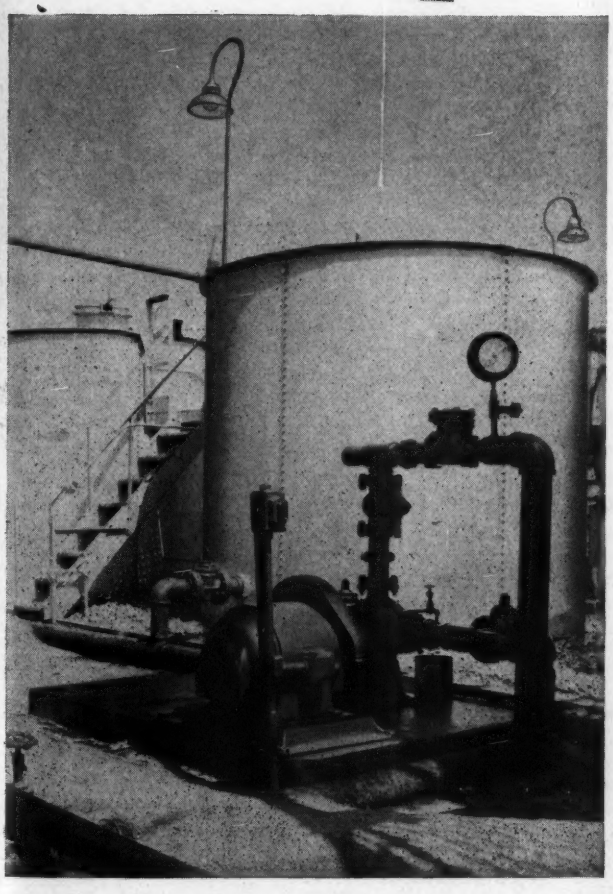
we cannot produce a water of such low pH as to render it corrosive to any of the metals used in condensing equipment. Probably the ideal optimum pH would be between 7.2 and 7.5 and any water of that pH which was free from sodium bi-carbonate should be an ideal water for cooling purposes from every angle.

We might argue that impregnation of the lumber with oil, paint or some other repellent would also prevent delignification and as far as it goes that argument would be correct. Considering first the question of oil impregnation we naturally must admit to producing a fire hazard to begin with. In addition to that, we must consider the physical fact that cooling of water depends on breaking up the droplets of water into a fine spray or mist. When an oily surface is produced on the lumber the droplets tend to roll or slide off the baffle boards and they fail to break up into the fine spray desired. Naturally this decreases the efficiency of the cooling tower. Another factor for consideration is that the presence of oil emulsion in circulating cooling water produces a high surface tension in the water which tends to prevent the droplets from breaking up into fine mist.

Painting the cooling tower will certain-

ONLY ELECTRIC MOTORS GIVE YOU

★Flexibility of Operation



This dependable, quick-starting 15 horsepower transfer pump simplifies oil handling in this Long Beach Harbor area tank farm.

1. 50% Lower First Cost
2. Years Longer Service
3. Finger-Tip Control
4. Unequalled Over-All Operating Economy
5. Minimum Repair Expense
6. High Salvage Value

★ Flexibility of operation is another plus-value of electric motors. They are comparatively easy to install, easy to move to new locations. They have ample reserve capacity to handle heavy overloads in emergencies. They give peak efficiency with both light and heavy loads. Automatic off-and-on time controls can be used for many installations. Let dependable, economical electric motors solve *your* pumping problems. Ask an Edison man for full information, without obligation.

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7-41

ly prevent delignification as long as the paint remains. For the same reasons as were mentioned in the preceding paragraph we should not have a smooth, oily paint but rather a dry-rough-finish paint such as aluminum bronze. The only difficulty with aluminum bronze is that it is highly soluble in alkaline solutions and therefore such paint will not last very long. Generally a tower will have to be repainted every year or two and in the average petroleum plant it is impossible to shut a tower down long enough to dry the wood and paint the tower as often as may be necessary.

Certain repellents have been offered to impregnate the lumber of the tower and if these are not too costly and actually do the work they show some promise. Studies are being made at this time on some of these products and a report on that phase will be available at a later period.

For the present time it would appear that the one solution to this phenomena is the elimination of sodium bi-carbonate. If the sodium bi-carbonate is present in the natural water the only way to remove it is, of course, by the addition of sulphuric or other acid in amount sufficient to neutralize all or virtually all of the sodium bi-carbonate. To be more specific, the methyl orange alkalinity of the circulating water should be as low or lower than the total hardness of the water. Ordinarily this can be accomplished without producing a corrosive water by acidifying sufficently to maintain the pH at between 7.2 and 7.5.

Where the sodium bi-carbonate is introduced by the addition of chemicals or Zeolitic softening, the obvious answer is to stop the use of such chemicals or softening method. There are other ways of preventing scale formation which do not depend on the addition of sodium carbonate. In some cases it might be economically feasible to Zeolite soften or lime-soda soften the water and then neutralize the excess alkalinity with acid. Ordinarily this is a more costly method than some of the other means of scale prevention but for the present we are considering merely the life of the tower and not the cost of scale prevention. There are certain hydrogen replacing Zeolites which do not produce sodium bi-carbonate or sodium carbonate and these unquestionably will prevent scale without injuring the tower structure itself.

There are other methods of treating with certain phosphates or with combinations of phosphates and acid which can prevent scale formation without producing injurious effects on the tower itself.

Incidental to these studies we have examined the effect of scale on cooling tower life. Unless such scale becomes so dense and heavy as to break down the tower it does little damage to the cooling tower itself. A light scale which might prevent sodium carbonate from contacting the wood might even be of benefit to the structure.

Algae in the cooling towers is unsightly and frequently finds its way into condensing equipment with disastrous results at that point. Insofar as our observation on 500 towers goes we have yet to find the first case where algae has done any actual harm to the tower itself. Certain types of slime algae might decrease the effciency of the cooling tower by providing a cushion that would prevent the droplets of water from breaking up into fine mist but this slime in no case has proven injurious to the tower structure itself.

During our investigation of cooling tower structures we have found a number of cases where an owner complained of a multitude of worms in water surrounding the structure. Careful examination of the structure and the worms themselves convince us that the worms feed on the algae and do not bother the wood structure itself. The presence, therefore, of these worms is helpful rather than injurious.

In the final analysis, presuming that the tower is properly built and strengthened and guyed, and presuming that the metal parts of the tower are of the noncorrosive type, we have little to fear as to the life of the tower except delignification. We feel confident in definitely stating that delignification can be completely eliminated by the complete elimination of sodium bi-carbonate and sodium carbonate in the circulating water.

COOLING TOWER SURVEY

MOSERG LABORATORIES
913 EAST 59th STREET
LOS ANGELES

CODE 125

COMPANY _____ LOCATION _____ TOWER NO. J. W.

MAKE Fluor TYPE Aerator WOOD Redwood

HARDWARE Brass BOLTS Brass NAILS Copper

BUILT 1936 REPAIRED _____

PREVIOUS LOCATION _____ DATE MOVED _____

TIME IDLE _____ CONDITION THEN _____

PREVIOUS WATERS USED _____

CONDITION

ALGAE Mossy, Solid

SCALE Slight CRYSTALINE DEPOSIT Yes

DELIGNIFICATION UNDER WATER Definite CONTINUOUSLY WET AREAS Definite

WINDWARD SIDE INSIDE Definite OUTSIDE Serious EDGES Serious

LEE SIDE INSIDE Definite OUTSIDE Serious EDGES Serious

ENDS INSIDE Definite OUTSIDE Serious EDGES Serious

UNDER ALGAE Same UNDER SCALE Same

AROUND NAILS Complete AROUND HARDWARE Complete

IS DELIGNIFICATION MORE PRONOUNCED ON TOP DECKS OR LOWER DECKS Same

CONDITION OF SLATS AND INSIDE AREAS Definite

GENERAL REMARKS _____

WOOD CLASS #1

CONDITIONS AT EACH CLASS _____

WATER CHARACTERISTICS DURING ENTIRE PERIOD Average system water Na_2CO_3 6500 ppm. Cl 2200 ppm. K. 100 ppm. SO_4 600 ppm. pH 9.3.

COOLING TOWER SURVEY

MOSERG LABORATORIES
913 EAST 59th STREET
LOS ANGELES

CODE 130

COMPANY _____ LOCATION _____ TOWER NO. Stabilizer

MAKE Fluor TYPE Aerator WOOD Redwood

HARDWARE Steel BOLTS Brass NAILS Copper

BUILT 1936 REPAIRED _____

PREVIOUS LOCATION _____ DATE MOVED _____

TIME IDLE _____ CONDITION THEN _____

PREVIOUS WATERS USED _____

CONDITION

ALGAE Very Little

SCALE None CRYSTALINE DEPOSIT None

DELIGNIFICATION UNDER WATER None CONTINUOUSLY WET AREAS None

WINDWARD SIDE INSIDE None OUTSIDE None EDGES None

LEE SIDE INSIDE None OUTSIDE None EDGES Very Slight

ENDS INSIDE None OUTSIDE None EDGES None

UNDER ALGAE None UNDER SCALE None

AROUND NAILS None AROUND HARDWARE None

IS DELIGNIFICATION MORE PRONOUNCED ON TOP DECKS OR LOWER DECKS Neither

CONDITION OF SLATS AND INSIDE AREAS Good

GENERAL REMARKS Very low concentration due to bleeding to other towers.

WOOD CLASS #1

CONDITIONS AT EACH CLASS Good

WATER CHARACTERISTICS DURING ENTIRE PERIOD Average water in system Na_2CO_3 100 ppm. K. 50 ppm. Cl 50 ppm. SO_4 80 ppm. pH 8.4.

Production « « » » Development

(Figures of Production and Stocks are in barrels of 42 Gals.)

	Total Production May	—DAILY AVERAGE— May, 1941	April, 1941	May, 1940
Group No. 1				
Arvin	22,151	715	685	2,014
Belridge—North	299,750	9,669	9,967	10,664
Belridge—South	64,052	2,066	2,014	2,108
Canal	154,647	4,989	5,073	5,778
Canfield Ranch	1,345	43	44	40
Coalinga	1,145,594	36,955	34,834	26,600
Cole's Levee	192,550	6,211	6,072	3,854
Edison	94,263	3,041	2,778	2,332
Elk Hills	369,873	11,931	11,946	12,464
Fruitvale	168,118	5,423	5,374	5,620
Greeley	189,602	6,116	6,102	3,735
Kern River	336,094	10,842	10,720	11,961
Kettleman North Dome	1,192,474	38,467	38,715	46,916
Lost Hills	110,018	3,549	3,397	4,112
McKittrick	114,686	3,700	3,824	3,545
Midway-Sunset	1,419,566	45,792	46,679	52,679
Mountain View	165,074	5,325	5,365	6,626
Mount Poso	300,593	9,697	9,190	10,092
Paloma	.....	.....	.....	174
Rio Bravo	378,700	12,216	11,900	8,010
Round Mountain	230,096	7,422	7,511	7,156
Strand	45,972	1,483	1,362	1,631
Ten Section	433,835	13,995	13,529	8,946
Tupman	343,841	11,092	7,713	1,631
Union Avenue	8,347	269	177	.....
Wasco	53,794	1,735	1,746	1,587
Wheeler Ridge	9,015	291	288	311
Group No. 2				
Capitan	59,402	1,916	1,684	1,814
Elwood	99,422	3,207	3,216	3,613
Rincon	136,217	4,394	4,305	3,964
San Miguelito	123,622	3,988	3,795	3,139
Santa Barbara	6,740	217	266	221
Santa Maria	291,570	9,406	7,950	5,536
Santa Maria Valley	560,799	18,090	17,978	17,077
Summerland	433	14	12	21
Ventura Avenue	1,060,563	34,212	33,917	33,886
Ventura-Newhall	346,538	11,179	11,169	7,393
Watsonville	775	25	25	27
Group No. 3				
Brea-Olinda	173,869	5,609	5,746	5,657
Coyote—East	113,829	3,672	3,756	4,039
Coyote—West	228,144	7,360	7,882	6,320
Dominguez	727,474	23,467	22,334	21,244
El Segundo	44,965	1,450	1,504	2,310
Huntington Beach	906,695	29,248	28,560	25,250
Inglewood	386,734	12,475	11,773	12,238
Lawndale	927	30	34	46
Long Beach	1,285,338	41,462	42,156	43,636
Los Angeles-Salt Lake	17,856	576	506	555
Montebello	438,382	14,141	14,518	21,730
Playa Del Rey	115,225	3,717	3,647	4,262
Potrero	71,548	2,308	2,360	1,694
Richfield	217,016	7,001	6,965	9,306
Rosecrans	297,605	9,600	9,933	10,074
Santa Fe Springs	728,453	23,499	23,560	25,994
Seal Beach	200,201	6,458	6,626	7,095
Torrance	270,657	8,731	8,752	11,242
Whittier	5,726	185	215	642
Wilmington	2,557,575	82,502	81,918	82,913
Total	19,318,350	623,173	614,067	613,524
April	18,422,014	614,067		
Increase	896,336	9,106		

SUMMARY OF CALIFORNIA OILFIELD OPERATIONS FOR MAY, 1941

STOCKS HELD IN PACIFIC COAST TERRITORY BY CALIFORNIA OIL COMPANIES

	May 31, 1941	April 30, 1941	May Changes	May 31, 1940
1. Gasoline-Bearing Crude	36,084,646	37,124,169	−1,039,523	35,721,588
2. Non-Gasoline-Bearing Crude	11,247,363	11,818,364	− 571,001	13,279,151
3. Unblended Nat. Gas	2,124,768	2,146,196	− 21,428	2,210,560
4. Gasoline (not including distributing and service stations)	14,439,055	14,829,155	− 390,100	17,278,777
5. Naphtha Distillates	1,990,514[1]	1,906,007[1]	+ 84,507	1,709,868[1]
6. Gas Oil and Diesel Oil	10,595,690	10,279,926	+ 315,764	9,810,933
7. Fuel Oil Residuum	55,081,713	55,517,423	− 435,710	65,101,337
8. All Other Stocks	8,398,652[2]	8,288,195[2]	+ 110,457	8,713,600[2]
	139,962,401	141,909,435	−1,947,034	153,825,814
[1]Estimated amount of unfinished gasoline contained in item 5	1,809,502	1,738,827	[illegible]	1,484,386
[2]Coke included in item 8	488,025	467,250	[illegible]	1,252,685

	New Rigs Up	Producers Active Drilling	Com-pleted	Daily Initial Output	Active Pro-ducing	Abandoned Wells Drillers	Pro-ducers
Group No. 1							
Arvin	..	....	....	....	14	....	....
Belridge—North	..	2	1	122	78	....	....
Belridge—South	..	....	....	....	202	....	....
Canal	..	....	....	....	35	....	....
Canfield Ranch	..	....	....	....	1	....	....
Coalinga	5	11	5	10,196	940	....	....
Cole's Levee	1	3	1	881	42	....	....
Edison	2	....	2	230	96	....	....
Elk Hills	1	3	1	450	196	....	....
Fruitvale	..	....	....	....	166	....	....
Greeley	3	4	4	7,115	51	....	1
Kern River	3	4	....	....	1,644	....	....
Kettleman North Dome	..	9	2	1,631	270	....	....
Lost Hills	1	1	....	....	307	....	....
McKittrick	2	1	1	315	203	....	....
Midway-Sunset	4	6	....	....	2,556	....	5
Mountain View	..	....	....	....	166	....	....
Mount Poso	7	3	1	95	299	1	....
Paloma	..	....	....	....	....	....	....
Rio Bravo	1	3	2	2,878	86	....	....
Round Mountain	2	2	1	250	229	....	....
Strand	..	....	....	....	11	....	....
Ten Section	2	2	2	5,084	102	....	....
Tupman	1	32	....	1,514	54	....	....
Union Avenue	..	....	....	....	1	....	....
Wasco	..	....	....	....	13	....	....
Wheeler Ridge	..	....	....	....	34	....	....
Group No. 2							
Capitan	3	....	3	2,938	48	....	....
Elwood	2	1	....	....	75	....	....
Rincon	1	2	....	....	69	....	....
San Miguelito	1	1	1	465	37	....	....
Santa Barbara	..	....	....	....	21	....	....
Santa Maria	2	1	....	....	201	....	....
Santa Maria Valley	8	4	2	744	154	....	....
Summerland	..	1	....	....	6	....	....
Ventura Avenue	7	10	4	2,441	331	....	....
Ventura-Newhall	7	20	2	1,965	511	....	....
Watsonville	..	....	....	....	7	....	....
Group No. 3							
Brea-Olinda	..	1	....	....	368	....	....
Coyote—East	2	2	....	....	89	....	1
Coyote—West	1	1	....	....	66	....	....
Dominguez	13	11	6	2,984	223	....	....
El Segundo	..	....	....	....	37	....	....
Huntington Beach	5	6	3	777	574	....	....
Inglewood	3	6	2	486	197	....	....
Lawndale	..	....	....	....	3	....	....
Long Beach	2	3	2	217	1,212	....	3
Los Angeles-Salt Lake	..	....	....	....	98	....	....
Montebello	..	....	....	....	350	....	2
Playa Del Rey	..	....	....	....	141	....	1
Potrero	..	....	....	....	21	....	....
Richfield	1	1	....	....	302	....	....
Rosecrans	1	2	....	....	179	....	....
Santa Fe Springs	1	....	....	....	587	....	....
Seal Beach	..	....	....	....	117	....	....
Torrance	3	2	2	190	624	....	10
Whittier	1	....	....	....	38	....	....
Wilmington	12	12	13	5,469	977	....	....
Miscellaneous Drilling	11	34	....	....	....	5	....
Group No. 4—Gas Fields							
Buena Vista Lake	..	....	....	....	....	....	....
Buttonwillow	..	....	....	....	16	....	....
Chowchilla	..	....	....	....	....	....	....
Delano	..	....	....	....	....	....	....
Fairfield Knolls	..	....	....	....	....	....	....
Goleta	..	....	....	....	....	....	....
Marysville Buttes	..	....	....	....	3	....	....
McDonald Island	..	....	....	....	5	....	....
Rio Vista	2	2	2	Gas	26	....	....
Semi-Tropic	..	....	....	....	....	....	....
Tracy	..	....	....	....	1	....	....
Vernalis	..	1	....	....	1	....	....
May	124	181	67	49,437	15,511	6	23
April	103	158	85	65,715	15,526	13	28
Decrease (*Increase)	21*	23*	18	16,278	15	7	5

C. N. G. A. Gadget-Kink Contest Brings

Out Many Valuable Ideas

Editor's Note: Pictures and diagrams mentioned in this article may be seen at the offices of the California Natural Gasoline Association, 510 West 6th St., Los Angeles.

The success of two so-called "gadget meetings" held in past years by the Taft Chapter of California Natural Gasoline Association was largely the reason for scheduling a joint meeting of the Los Angeles group and Taft Chapter of the Association in May for the purpose of bringing out new devices, tools, implements and new improved ways of doing old jobs as developed in the natural gasoline and allied industries. The meeting was held at Hotel Lebec on the Ridge Route, a "half-way" point well suited for such a gathering, and was attended by over two hundred with a total of 76 entries. Cash and other prizes were awarded upon the scoring of five judges who graded on the basis of originality and ingenuity; value, adaptability and practicability; and simplicity and convenience of construction.

An entry form was filed for each gadget or kink, the form containing the name, address and connection of the man making the entry, together with a description of the entry and its purpose. In most cases the entry form was accompanied by a drawing, picture or sketch. Following are listed the entries.

1. A Piston Puller for Vertical Engines. This device consists of two parts —first, an old automobile screw jack with a fork attachment made of one inch iron pipe with a lug welded on each prong about one inch from the end. The second part, which is the puller, is a steel band or ring with a bail attached. The band is drilled and tapped for four cap screws which are turned down on the end so that they will enter the top platen ring groove. After the crank bearing cap half and crank bearing bolts are removed and the crank placed in top center position, the jack is placed in position under the crank pin on a block of wood on the bottom of the crankcase, with the prongs of the fork entered in the crank bearing bolt holes in the rod. The piston is then raised until the head ring is out of the cylinder. This ring is then removed and the puller ring slipped over the head of the piston; the cap screws are turned in and the piston is then ready to lift out of the cylinder. The procedure used in installing the piston is, of course, the reverse. The fork and jack are useful also, in changing or inspecting crank bearings of the insert type. Entered by Kenneth D. Eastman, General Petroleum Corp.

2. Gas Engine Fuel Economizer: The purpose of this gadget is used on Union Tool type engines to prohibit the flow of gas to an engine on non-firing strokes. The device effects a substantial saving in fuel which saving increases as the intake valve wears, permitting gas to flow through the cylinder on the off strokes. The control of the valve is on the rocker arm rod. Photograph on file. Entered by E. D. Smyser, C.C.M.O. Co.

3. Volatile Liquid Pump Discharge Surge Chamber. The purpose of this device is to steady the pressure on the discharge of a reciprocating pump. It consists of a ¼" steam heating coil inside of a 6" pipe. The heating coil assures a gaseous form in the surge chamber which tends to decrease pressure fluctuations caused by a reciprocating pump. Entered by Warren Kraft, Honolulu Oil Corp.

4. Dropped Ring Preventer. The purpose of this gadget is to prevent piston ring from dropping out of cylinder under certain conditions. It is made by grinding off the points of an old spark plug after the porcelain and bushing have been removed. To the end of this is welded a round metal rod slightly less in diameter than the barrel of the plug. The rod should be of sufficient length that when the gadget is screwed into the spark plug hole it will stop the backward motion of the piston before the power ring drops out of the cylinder. Entered by Clarence A. Davis, The Texas Company.

5. Method of changing wedge bolts in Clark Engines, without removing crosshead slippers. This kink provides a procedure which saves from one to hours on a job of removing wedge bolts. The procedure is as follows:

1. Jack engine over until the position of the crank is down and slightly forward.
2. Remove wrist pin.
3. Slide the power piston forward until the nuts on the wedge bolt touch the lower slipper eccentric bolt.
4. With the crank in the above described position, the top of the wedge bolt is now forward of the top clipper eccentric bolt.
5. Screw wedge bolt up until the bottom is clear of the lower slipper eccentric bolt.
6. Push cross-head and slipper as far back toward power cylinder as possible.

★ PIPE PERFORMANCE

OIL COUNTRY TRADE MARK YOUNGSTOWN TUBULAR GOODS

There is a difference in pipe just as there is in oils. In appearance two brands may be very much alike, but materials and workmanship are what really count.

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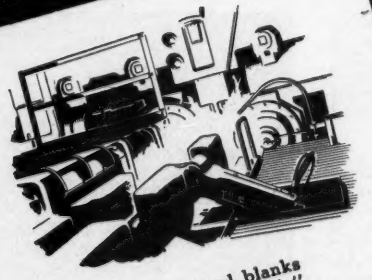
THE YOUNGSTOWN SHEET
AND TUBE COMPANY
General Offices - Youngstown, Ohio

YOUNGSTOWN

Manufacturers of Carbon, Alloy and Yoloy Steels



Here you see white hot steel blanks entering a piercer. The "rounds" pass between rolls and over a piercing point, on their way to become seamless tubular goods.

Youngstown's pipe is distributed by:
The Continental Supply Co., - - - Dallas, Texas
Continental Emsco Co., Inc.,
30 Rockefeller Plaza, New York City
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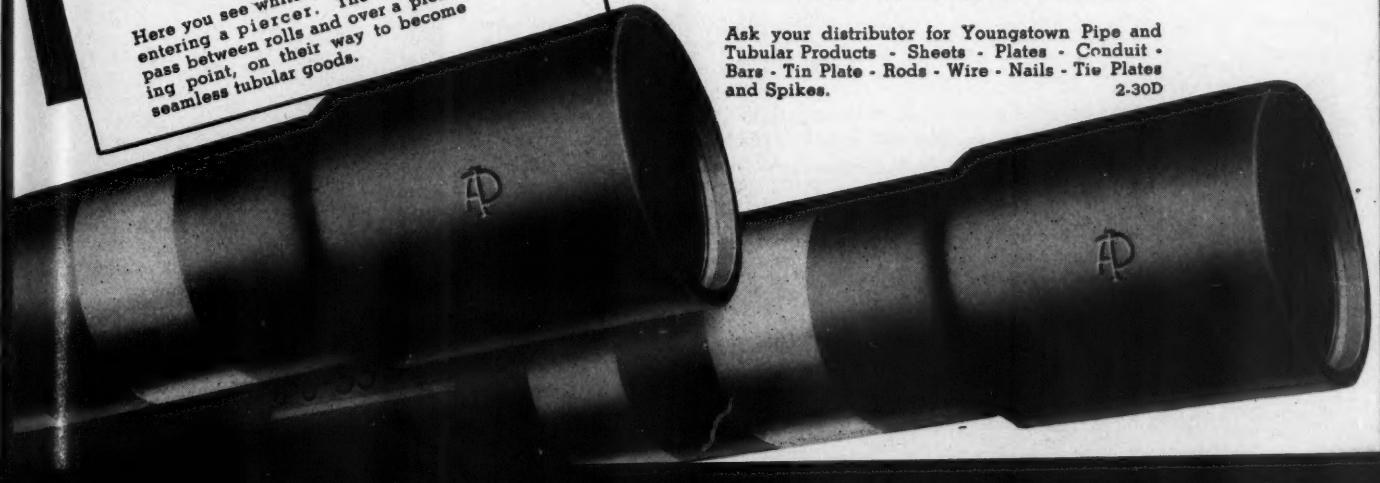
610 Petroleum Bldg., Los Angeles, California

Ask your distributor for Youngstown Pipe and Tubular Products - Sheets - Plates - Conduit - Bars - Tin Plate - Rods - Wire - Nails - Tie Plates and Spikes. 2-30D



7. Move crank sideways toward side of engine.
8. With crank in this position, the wedge bolt can now be screwed up and out without interference from any part of engine.

Above entry by Clarence A. Davis, The Texas Company.

6. A Reliable Pilot to keep fires burning and to prevent fire box explosions. Reference to the drawing on file shows the various parts making up this device as follows: One 1" x 5" nipple shown at A, with a "V" shape slit out about two thirds the length of the nipple on one side only, this die of the nipple facing the inside of the fire box. A 1" x ¼" reducer E is screwed to a piece of ¼" pipe, F; the inside end of the ¼" pipe is then tapped for the ⅛" nipple, C. The reducer is then drilled with six holes, E, 3/32" dia. These holes should face the outside end of the burner housing so that air will be drawn through the pilot making a rich mixture. The air to the fire box passes around the nipple, A, at both sides and the end, thus creating a turbulence at the slit, B. This keeps the flame from traveling away from the pilot or snuffing out. In placing the pilot in the burner housing, best results will be had if it is set at right angles to the incoming air, about three inches below and three inches behind the end of the mixing tube. If set in this manner the pilot will last from nine months to a year by using common black pipe. Entered by J. H. Boyle.

7. Flywheel safety lock for Cooper engines. Purpose is to prevent wheel from rolling while unit is being repaired. Method of construction and use indicated by drawing and picture on file. Entered by T. C. Wallace, Southern Counties Gas Company.

8. Handles for Acetylene Containers. To provide a safe method of handling such cylinders by two men. Manner of construction and method of use of this gadget is indicated on the pictures on file. Entered by R. N. Gingles, Standard Oil Company of Calif.

9. Stopcock Changers. A device for changing stopcocks on ¾" and 1" gas services without shutting gas at main or allowing it to blow. Specifications and construction of this device is shown in the drawing on file. Entry by Jay R. Brick, Southern Calif. Gas Co.

10. Tube Cutter for Griscom-Russell Condenser Sections. Purpose is to facilitate the removal and replacement of new tubes in condensing sections. Design and application of this gadget is shown on the drawing on file. Entry by J. P. Ioppini, Belridge Oil Co.

11. Cylinder crack sealer. This gadget, is used to effectively seal cracks in cylinders, particularly on the power and at exhaust ports. Reference to the drawing on file shows the function and application of the various parts of this gadget as follows: Unit is placed in position in cylinder over crack and placed in pressure with nut B on rod A. Cylinder is filled with litharage. Pin C is struck a heavy blow that forces litharge into crack. Rod E is bolted to end of cylinder as a back-up. Entered by A. Kittelberger, Signal Oil & Gas Co. Gadget first made by Clarence Baker, deceased.

12. Special Slide Rule for Gravity Calculation. To facilitate the calculation of specific gravity when using the Schilling Gas Gravity Bottle or other effusion methods. With slide rule shown in drawing, computation is made as follows:

a. Set slide so that pointer indicates the "time of flow of air".
b. Real off correct Edwards Gravity on upper scale directly above the "time of flow of gas" on the lower scale.

Entered by W. T. Switzler, Standard Oil Company.

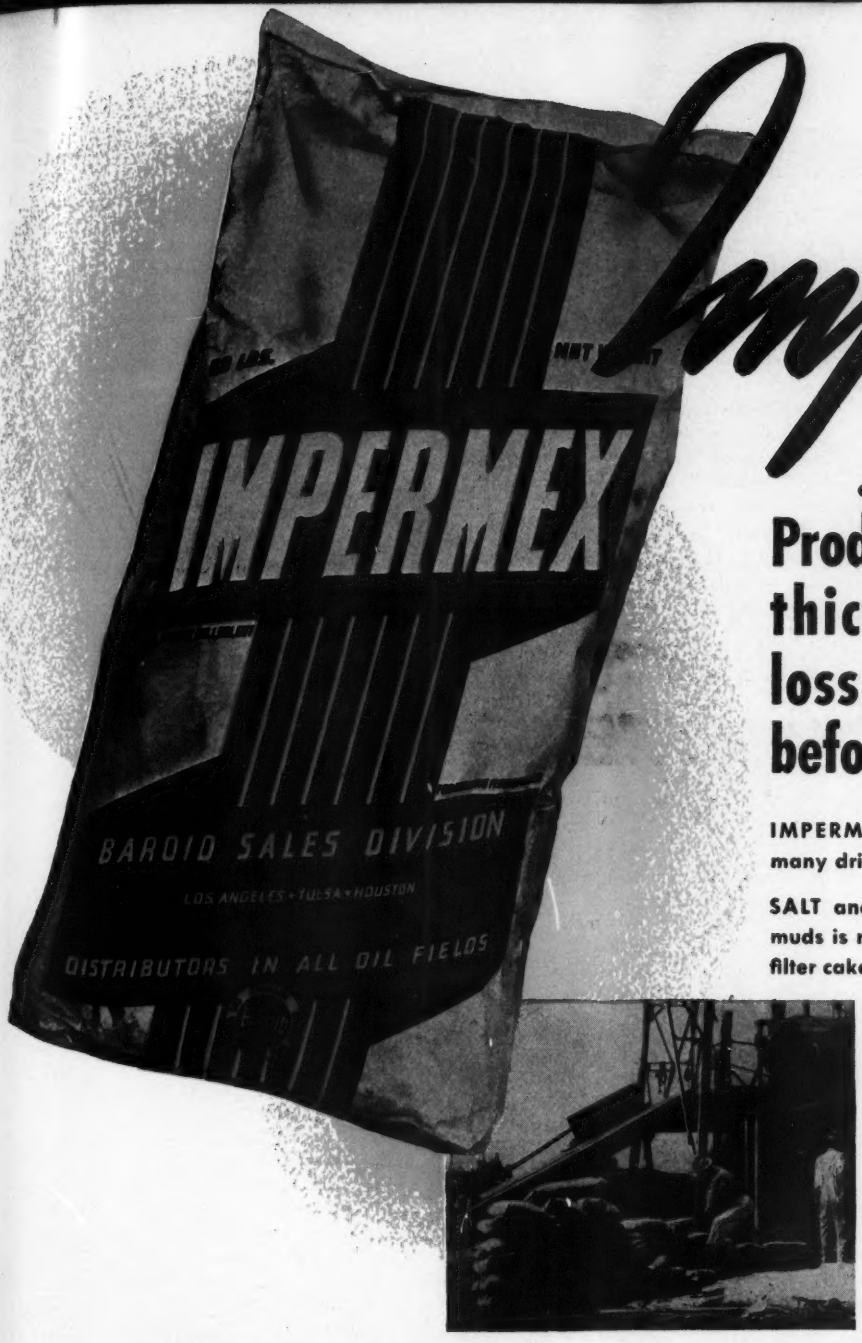
13. Back Bearing Remover for Westcott Gauge. The drawing of this gadget on file in office, illustrates the construction and application of this entry by H. Jimenez of the Southern California Gas Company.

14. Main Shaft Aligner. This gadget provides a straight-edge to align main shaft of Westcott Orifice Gauge. Reference is made to the drawing on file for details as to the design of this item. Entry by Ed Ruppert, Southern Calif. Gas Company.

15. Core Loosener. To remove cores from stop cocks. As indicated on the picture on file, the device is placed on the cock and pressure is applied upon the core with the screw. Permits the removal of cores from cocks without damage to the cock which, under normal procedure, would not have been possible without mutilation of the washer, threads, nut and core itself. Entry by C. S. Beard, C. C. M. O. Co.

16. Combination Dope and Soap Can. To permit the holding and mixing of soap suds used for testing for leaks as well as for carrying dope used to seal threaded joints The drawing on file shows the specifications of this gadget.

Piston Puller



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BAROCO—A Salt-Water-Resisting Drilling Clay.
STABILITE—A Chemical Mud Thinner.
AQUAGEL-CEMENT—For Recovering Lost Circulation and Cementing Casing.
SMENTOX—For Counteracting the Effects of Cement Contamination and for Reconditioning Cement-Cut Mud.
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Entered by Jay R. Brick, Southern California Gas Company.

17. Ring Expander. For facilitating the installation and removal of piston rings. The drawing on file shows the design and construction of this device. Entry by Earl I. Levings, Lomita Gasoline Company.

18. Procedure for Testing Leaky Condenser Tubes with Air. The location of bad tubes by the use of air pressure is indicated; First—the tubes with small leaks can readily be detected by a cloudy appearance of the air escaping through the tube which, no doubt, is caused from moisture in the tube or vessel previous to the test. Second—the bad tubes can be located by the noise of the escaping air in the tube. By placing a finger over the tube the noise will be muffled, proving this to be the bad tube. If several tubes are leaking it is advisable to plug each tube as located, with a cork to muffle the noise, so tubes with smaller leaks can be more readily located. This method not only saves the initial cost of Test Heads, but also the time and labor of installing, removing and storing same. Caution should be observed in that vessels operating with gases should be properly vented to eliminate the possibility of explosive mixtures. Entry by Bennett Schock General Petroleum Corp.

19. Gas Flow Direction Indicator. This gadget consists of a nipple housing a butterfly connected to a pointer on the outside of the nipple. The shaft runs on a bearing in the nipple while the end running out to the indicator is packed off, as indicated on the drawing on file. Entered by Woodrow Krigbaum, C. C. M. O. Co.

20. An Auxiliary Front Drive Clock. This device may be clamped on the front of any meter to run a one hour chart, thus eliminating the necessity of resetting static and differential pens, changing clocks, etc. The photograph on file shows the gadget in use. Entered by Melroy Welch, Barnsdall Oil Co.

21. Circulating Water Heater. The purpose of this device is to keep the entire 100°F. bath at more constant temperature. Its design is shown in the drawing on file. The action of the gadget is such as to lift the coolest water from the bottom of the jar, up and around the thermo-regulator and out of the side outlet, which imparts a rotary motion to the whole mass of water and tends to keep a more constant temperature of 100°F. in the entire bath. Entered by Jack Colvin, O. C. Field Gasoline Corp.

22. Chemical Feeder. This gadget was developed to feed a heavy boiler compound at about a hundred drops a minute, or two gallons a day. Reference to the drawing on file shows how the actuating fluid is throttled at needle valve (3) through sight feed (A) where the flow is visible. This then enters the pot and displaces chemical out the line at the left of the pot. The chemical enters the rundown line ahead of the accumulator in the absorption plant cycle. Treatment at this point protects from dissolved gases, the boilers in which the condensate is used, and all plant lines and tanks, as well as any shipping lines into which the raw gasoline or condensate water may go. Entered by H. R. Alfson, General Petroleum Corporation.

23. Valve Jack for Worthington Gas Engines. This jack is used to change exhaust valves on engines where head room beneath the power cylinder is restricted. The jack is placed beneath the exhaust valve cage, and raised by air pressure; the flange bolts removed and the cage lowered by releasing air pressure. The jack is then rolled to the side of pit and cage removed. The drawing on file shows the general arrangement of this device. Entered by Roy Lemmon, Union Oil Company of Calif.

Stopcock Changer.

24. High and Low Liquid Level Alarm. The purpose of this device is to cause a warning whistle to blow automatically when liquid level gets dangerously high or low. The design is shown in the drawing on file. Entered by J. F. Webster, O. C. Field Gasoline Corp.

25. Glycol Dispenser made from standard fittings. This device is designed to pump from an outside drum into the laboratory, and consistently measure out, a given quantity of glycol. Design and specifications are shown in the drawing on file. Entered by Jack Colvin, O. C. Field Gasoline Corp.

26. Top Cover Plate Remover. This device is designed to permit removal of the top cover plate of Westcott Orifice Gauge without damaging gasket. Its design is shown in the drawing on file. Entered by Ed Ruppert, Southern Calif. Gas Company.

27. Specific Gravity Control Assembly. The purpose of this gadget is to maintain any desired specific gravity of cooling tower basin water by automatic bleed off control. The sketch on file shows the general features of this assembly. Entered by D. T. Teeter, Standard Oil Company of Calif.

28. Test Gauge Holder. This device is designed to provide a means, other than by threading, of attaching a test gauge and pump (or compressor) to 1" pipe for testing. As indicated on the drawing on file, the holder consists of an expanding rubber plug for attachment to the pipe to be tested, suitable gauge connections, bleeding valve, integral check valve and external inflation valve. It is designed primarily for use with a hand pump, but is easily adapted for use with a compressor. Entered by Jay R. Brick, Southern Calif. Gas Co.

29. Device to Raise Pressure on Gas Traps. When operating a gas trap at lowest possible pressure, this device is a means of increasing pressure to force oil out when necessary. General design and arrangement is shown in the drawing on file. Entered by Ralph Openshaw and T. T. Rissinger, Union Oil Co. of Calif.

30. Repulsive Liquid Level Control. This device is a glandless, liquid level control for gasoline, butane and other volatile liquids. It is operated by two magnets which are used in opposition through a non-magnetic shell. They are placed one above the other, one on the inside of the float chamber and the other on the outside with the north pole to the north pole so that a repulse action takes place. As the liquid level rises, the inner magnet swings down allowing the outer magnet to follow in its floating position and this, in turn, operates a motor valve to put pressure on diaphragm operated valve on liquid leaving tank. General arrangement is shown on sketch on file. Entered by H. A. Kuster, Lomita Gasoline Company.

31. Device for plugging off leaking exchanger tubes. The sketch on file shows

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4-star performance from your motor

SIGNAL OIL COMPANY

the design of this gadget with explanatory notes. Entered by A. Kittelberger, Signal Oil and Gas Co.

32. Self Centering Metallic Gasket. This gasket automatically centers itself between pipe flanges by means of the fin which rests on the unremoved remaining bottom bolts, as indicated in the sketch on file. Entered by Emil Carl Bridgers, Corpus Christi Recycling Corp.

33. Liquid Return Manometer Head. Purpose of this device is to hold liquid blown out of manometer tube and automatically refill the tube when by-pass is opened. It consists of an expansion chamber of sufficient capacity to hold liquid from manometer tube, equipped with baffle to prevent liquid from blowing through outlet. Top of chamber is threaded to allow sealing of tube with compound, such as litharge. Fine wire threaded through the bore, leads entrapped gas bubbles to the surface when liquid is returned to tube by opening bypass valve or taking manometer out of service. Drawing on file. Entered by Burton Hufford, Standard Oil Company of California.

34. Clarifier for Gauge-Glasses on Hot, Dirty Oil. The purpose of this gadget is to keep gauge glass clean so that level in tank can be readily ascertained. As shown on the sketch, on file, this gadget has a ¼" condensing coil which runs from the vapor line to top valve of gauge mount. Enough condensation takes place in ¼" coil to keep inside of gauge glass above liquid level clean. Entered by Warren Kraft, Honolulu Oil Corp.

35. Orifice Meter Clock Adapter. For revolving charts at various time intervals such as ½, 1, 2, 8 or 12 hours. This adapter is suitable for use in all types of orifice meter cases and eliminates the necessity for removal of chart dial and clock installed in the meter case. The photographs show the general arrangement. On file. Entered by Ralph Openshaw, Union Oil Co. of Calif.

36. Filler for Test Motor Gasoline Tank. The device is designed to automatically keep test motor gasoline tank full. Its design, showing piping arrangement from conventional fuel line on truck to test motor is shown on the drawing on file. Entered by C. D. Gard, Union Oil Company of Calif.

37. Gas Sampling Bottle and Gas Sampling Tube with Special Fittings. Purpose is to provide a safe, economical and practical method of collecting and transporting gas samples. Specifications and arrangement of this gadget is shown in detail on the drawing on file. Entered by W. A. McGlashen Southern California Gas Company.

38. Differential Shaft Packing Nut Remover. This gadget is designed to simplify the removal of differential shaft packing nuts from orifice meters. The drawing on file, shows its design. Entered by H. Jimenez, Southern California Gas Company.

39. Cooper Exhaust Valve Spring Jack. This gadget is used to collapse exhaust valve spring so that valve stem locks can be removed. Its design and application is shown in the drawing and photographs, on file. Entered by T. C. Wallace, Southern Counties Gas Company.

40. Cooper Intake Valve Spring Jack. This gadget is used to collapse valve spring in order to unscrew valve from

Economizer

spider. Its design and application is shown in the drawing and picture on file. Entered by T. C. Wallace, Southern Counties Gas Company.

41. Automatic Chart Changer. This device is designed to automatically change recording charts. A large supply of charts is supported in the upper part of the chart box and are kept pressed forward by a spring and plate. One chart at a time is moved downward through a narrow slot which is adjusted to permit the passage of only one chart. As each chart finishes its recording and drops into the lower compartment to await collection, the next chart is fed into the slot and begins recording. The mechanism is enclosed in a weatherproof case. General details are shown in the drawing, on file. Entered by J. A. Swindle, General Petroleum Corp.

42. Dowel Drilling Jig. To permit drilling of dowel holes in orifice fittings and flanges so that they will all line up. It is designed with an expander or spreader that centers the jig in the orifice fitting or meter run flanges so that when dowel pin holes are drilled they all exactly line up on the inside. The gaskets are made with dowel pin holes to match so that when meter run is assembled complete, everything is exactly in line. See drawing on file for details. Entered by Ralph Openshaw, Union Oil Co. of Calif.

43. Packing Gland Wrench for Westcott Meters. This gadget is designed to permit tightening of packing nut inside of static spring. No drawing. Entered by L. P. W. Des Brisan, Southern California Gas Company.

44. Vacuum Crank Case Ventilation for a 2-XVG Compressor. This layout eliminates water vapors from crank case before they can condense and form sludge in spite of a cool crank case. It also eliminates crank case leaks (particularly around shaft wipers) as this system maintains a vacuum of one inch mercury. It further provides for fresh air in the crank case through horse hair filter. Design details are shown in the drawing on file. Entered by Roswell S. Lee, Western States Gasoline Corp.

45. Pilot Valve Steam Pump Speed Governor. This device is an adaptation of a steam pump speed governor to pilot valve for motor valve operation on steam supply to pump and is especially adapted for high pressure super-heat steam supply. Design details are shown on the sketch on file. Entered by Clyde H. Peter, Belridge Oil Company.

46. Device for Recovery of condensed Water and Heat from Preheater Condensate. The arrangement and design of this gadget is shown in the drawing on file. Entered by Eugene Newman, Gilmore-Dabney, Inc.

47. Safety Door for XVG Flywheel Spotting. To provide automatic protection for operator while cranking engine as well as to fully guard all moving parts. As shown in the drawing on file, this safety door is arranged with valve and switch devices which vents air pressure between valve and relief valves and grounds magnetos. Entered by I. W. Willard, Standard Oil Co. of Calif.

48. Reverse Acting Diaphragm Valve. To change the operation of direct operation valve to reverse acting valve. Design of this gadget is shown on photo on file. Entered by Herman H. Davis, Standard Oil Co. of Calif.

49. Lease or Field Production Operations Board. To quickly and accurately furnish certain field operating information to pumpers, inspectors and testers. As shown on the sketch on file, a dia-

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gram of the well locations of the lease or field is laid out on a piece of pale green pulp board 24" x 36". Each well location is identified by a metal bound paper tag bearing the well number. This tag is fastened to the board with the conventional variety of kitchen cupboard cup hook. The lease crude tanks are also identified and the status of each tank shown by hanging a properly marked tag at the tank location. Entered by J. H. Watson, Union Oil Co. of Calif.

50. Cooper Air Starting Valve Spring Jack. Used to Remove valve stem locks. The design and application of this device is shown in the picture and drawing on file. Entered by T. C. Wallace, Southern Counties Gas Co.

51. Orifice Meter Fitting and Tube Aligner. To hold both orifice meter fitting and bored tube in centered alignment in the work of permanent bolting together. This entry was accompanied by detailed drawings which are on file. Entered by Henry Keil and J. A. Gendron, Southern California Gas Co.

52. Cooper Exhaust Valve Rocker Arm Jack. This device is used to remove push rod from engine. Drawing and picture showing its application is on file. Entered by T. C. Wallace, Southern Counties Gas Co.

53. Goggle Case. Purpose is to provide workman with a means of carrying goggles on their persons at all times, thus giving them maximum eye protection. Case consists of a medium stiff leather pouch with two spring steel clips attached to back in such a manner that they may be slipped over a belt, pocket or overall bib. Entered by R. N. Gingles, Standard Oil Co. of Calif. Photographs on file.

54. Cooper Main Bearing Cap Lifter. This device is used to remove bearing cap. Its design is shown on drawing on file. Entered by T. C. Wallace, Southern Counties Gas Co.

55. Scaling Tool. Used to descale 1" brass tube gas coolers. This tool is formed to fit the tube and is used with a light weight pneumatic chipping hammer. Drawing showing specification is on file. Entered by T. T. Rissinger, Union Oil Co. of Calif.

56. Automatic Drip Unloader or Trap. Used to drain condensate from gas lines or scrubbers, is designed to work on either vacuum or pressure. Float will work on either water, gasoline, crude oil or light foaming b.s. Pictures and drawing on file. Entered by T. T. Rissinger, Union Oil Co. of Calif.

57. Pump Piston Ring. For pumping hot water, gasoline, reflux and oil. Sketch of this babbitt ring is on file. Entered by I. B. Funk, Cowan Oil & Refining Co.

58. Device for Automatically Operating Traps on Vacuum Lines. Detailed drawing of this gadget is on file. Entered by Eugene Newman, Gilmore-Dabney, Inc.

59. Orifice Plate Mandrel. To permit the measuring of orifice plates quickly and checking to determine if they have been machined correctly. Drawing of this gadget is on file. Entered by Harold Davis, Union Oil Co. of Calif.

60. Soft Rubber Tapered Plug to Connect Manometer to Orifice Meter. This is used instead of the usual rubber hose. Drawing on file. Entered by C. V. Dix, Union Oil Co. of Calif.

61. Gauge Hand Puller. To supply emergency need for a gauge hand puller not available on the job. Sketch of this pressure gauge tool is on file. Entered by Benjamin Davies, Standard Oil Co. Arabia—by proxy—R. N. Donaldson.

62. Syliphon. Used to give reading of static pressure of air or gases in inches of water .001" to .7". Also, by using with a pitot tube, velocities may be obtained. Sketch on file. Entered by H. A. Dresser, The Fluor Corp. Ltd.

63. Routine Operator. This electrical mechanical device is designed to do routine jobs at specified time intervals, such as opening or closing valves, starting or stopping pumps, blow whistles, rings bells, etc. Sketch and description is on file. Entered by D. L. Tucker, Standard Oil Co. of Calif.

64. Float Aligner. To align mercury float in Westcott Orifice Gauge. Sketch is on file. Entered by Ed Ruppert, Southern Calif. Gas Co.

65. Snap Action Valve. Used to control sump pump. This control system for the intermittent operation of a sump pump is sketched in detail in drawing on file. Entered by Harlan J. Wilson, Standard Oil Co. of California.

66. Westcott Front Bearing Extension Socket. Used to remove front bearing on Westcott Differential Gauge without Removing Case. Sketch of this device is on file. Entered by I. M. Greenfield, General Petroleum Corp.

67. Expanding Mandril. Used to maintain diameter of pipe while threading and installing flanges. Detailed drawing on file. Entered by T. G. McAlister, The Texas Company.

68. Direct Reading Mercury Column Pressure Gauge Tester. Used for checking vapor pressure gauges. Detailed drawing of this entry is on file. Entered by C. D. Gard, and Hugh Multer, Union Oil Co. of Calif.

69. Metallic Packing Spring Hook. To decrease time required to change metallic packing on hot piston rods and reduce the hazard of burning hands. Sketch and photo on file. Entered by C. A. Davis, The Texas Company.

70. Boiler Gauge Glass Light. To provide better light on gauge glass and effect a saving in lamps and electricity. Drawing of this device is on file. Entered by T. T. Rissinger, Union Oil Co. of Calif.

71. Ice Chopper. Used to chop ice to proper size for laboratory use. Drawing of this gadget made from scrap materials is on file. Entered by Jack Colvin, O. C. Field Gasoline Corp.

72. Thermo Syphon Heater. Used for heating gasoline to drive off wild vapors. Drawing of this device is on file. Entered by Eugene Newman, Gilmore-Dabney, Inc.

73. Procedure for determining the Taper of an Engine or Compressor Cylinder without Use of a Micrometer. (1) Fit a ring in the back end of the cylinder and with feeler gauge determine the clearance gap. (2) Fit the same ring in the front end of the cylinder and with feeler gauge again determine the clearance gap. (3) The difference between the two clearances divided by (3.1416) is equal to the taper of the cylinder. Entered by C. A. Davis, The Texas Company.

74. Cool Coil Partitions in Headers. Used to take place of return bends. Drawing of this arrangement is on file. Entered by Eugene Newman, Gilmore-Dabney, Inc.

75. Lube Oil Supply System. Overhead piping system supplies compressors with oil, thereby effecting a saving in labor, elimination of contamination or use of wrong oil and permitting maintenance of cleaner compressor house. Description on file. Entered by A. L. Hendrickson, O. C. Field Gasoline Corp.

Tide Water Associated Announce Retirement Plan

Tide Water Associated Oil Co. has announced to its employees the adoption of a non-contributory Retirement Allowance Plan, the purpose of which is to regularize retirement practice in its far flung organization.

The Plan provides for a normal retirement allowance to employees attaining age 65 and having had 20 or more years of service. For such an employee, the annual retirement allowance from the company is the amount which, when added to his Federal Primary Insurance Benefit and any other Governmental pension, will produce a total annual income of 1.5% of the entire cash compensation he has received from the Company, with a minimum aggregate payment of $50.00 a month. For employees retiring earlier, reduced retirement allowances will be payable.

THIS LAUGH OFF!!

On the war theme, **Tom Pike** comes up with this one:

A maiden lady lived in a small house in the country with one maid. One morning the bell rang. The maid admitted the visitor, an evacuee officer arranging for homes for children evacuated from London, then rushed upstairs.

"Please mum," she blurted out breathlessly, "you've got to have two babies, and the man's downstairs!"

Gene Reid is alleged to have picked this one up:

"Did you knock on that traveling man's door and wake him as I told you to do?" inquired the boarding house lady.

"Yes'm," replied the new maid fresh from the country. "But he didn't wake up, so I finally had to go in and shake him."

"Good heavens, don't you know better than to ever go into a traveling salesman's room?"

"Yes'm," responded the new maid, "I do now."

Then, there's **Harmon Owen's** story:

"You ought to feel highly honored, young man. Do you know that today I have refused to see seven insurance men?"

"I know," said the determined salesman, "I'm them."

Quoting Southwestern Purchasing Agent:

R. E. Imhoff: "How were the fish when you were out last week, Ray?"

Ray Geiler: "Well, Sir, I really don't know. I dropped them a line several times but got no reply."

"Why did you tell those fellows that there's plenty of fishing in these eddies, when you know that there aren't 2 trout in the whole stream?"

"Well, the less fish, the more fishing to get 'em, eh?"

Bob Lytle recounts this touching tale:

A Jewish merchant was dying, and mamma, his two daughters and three sons were at his bedside saying the Kaddish. Finally mamma bent over her departing spouse and said: "Can you hear, papa? We are all here—all your daughters and sons and old mamma, praying for you."

"Is Milton here?" whispered the dying man.

"Yes papa."

"Is Moe here?"

"Yes, papa."

"Is Abe here?"

"Yes, papa."

With a scream of anguish papa sat up in bed. "Then who in hell's looking after the store?"

Halt; who goes there?

American.

Advance and recite the second verse of "The Star Spangled Banner."

I don't know it.

Proceed, American.

Charley Chandler recalled this one:

A hostess, serving her guests wine, remarked to one gentleman:

"I should not be offering you wine. You are the head of the Temperance League."

"Oh, no," he replied, "I am the head of the Vice League."

"Well," she said, "I knew there was something I shouldn't offer you."

Names used on this page are entirely fictitious, and any resemblance to persons either living or dead is purely coincidental.

WEIGHT INDICATOR POINTS
Based on percentage of sales, Martin-Decker spends eight times more money for research than the average corporation—large or small.
The reason is this: You can't expect modern drilling operations to be more efficient, more accurate, or more economical than the dependability of the instruments you use to control them. So Martin-Decker must constantly keep in step with drilling progress—building instruments to meet every control need.
That's why Martin-Decker's research is constantly directed toward perfecting the instruments today for guiding tomorrow's 20,000-foot wells.
MARTIN-DECKER CORP., LONG BEACH, CALIF.

Field Development

Los Angeles Basin

Wilshire Annex Quits West Coyote Wildcat

Finding but little sand and no oil showings in the hard Repetto and Puente shales to 9034 ft., Wilshire Annex Oil Co. abandoned its Community No. 1. An exploratory well, the project was located near the E. ¼ corner of sec. 14,3-11, three quarters of a mile west of the limits of the West Coyote field.

El Segundo Wildcat Suspends Operations

It looks as though the old Julian Petroleum Co. wildcat, located south of Standard Oil Co.'s El Segundo tank farm, will again become only a stub of surface casing protruding above the ground. Dominguez Extension Oil Co., which recently redrilled the old timer from 3750 to 5926 ft., found the showings disappointing and suspended operations without making any kind of a test.

Drilled to approximately 6000 ft. in the heyday of the old Julian company, the well was deepened to 7865 ft. by Sunset Oil Co. in 1937. The schist basement was not encountered.

Joint Test Planned For Towsley Canyon

Pooling interests to seek a new deep field adjoining the ancient shallow pumpers in Towsley Canyon, Barnsdall Oil Co., Bandini Petroleum Co. and Ambassador Petroleum Co. are preparing to drill Limbocker No. 1 in the center of the north half of sec. 17,3-16. Modelo formation is found at the surface in this locality and the operators believe that the project will make or break above 6000 ft. Situated on Pico Anticline, faulting is depended upon for the necessary closure.

Just east of the main highway in sec. 10,3-16, St. Anthony Oil Corp.'s Lassalle No. 1 is coring below 4200 ft. in brown shale with occasional streaks of live oil sand and is now drilling below 1000 ft. Located in the best looking prospect in the Newhall area. The Miocene was topped at approximately 3185 ft.

The Texas Co.'s Whitnah No. 1, sec. 14,3-16, recovered only water with a trace of oil after plugging bottom from 4999 to 3664 ft. and testing several intervals below 3200 ft. The hole was plugged to 744 ft. and abandoned.

Kenneth Oil Producing Co. spudded Shepherd-Roy No. 1 and is now drilling below 1000 ft. Located in

LOS ANGELES BASIN WILDCATS

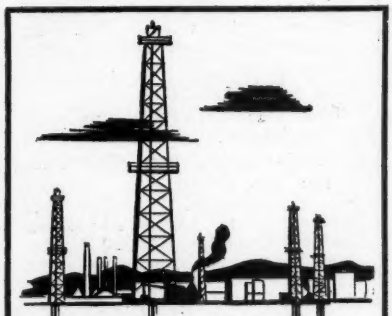
Area	Well	No.	Section	Depth	Status
Athens	Rankin & Williams	1	7, 3-13	9278	Coring
	Lytle, Robt. S., Operator, Anderson	1	1, 3-14	8087	Abandoned
Castaic	Barnsdall Oil Co., Honor Rho A-19-1		7, 4-16	7560	Drilling
	Bankline Oil Co., Videgain	101	17, 4-17		Fdn. forms
	Hathaway Company, Ram	2	31, 5-17		Foundation
	Jasper, Fred S., Videgain	1	17, 4-17	6055	Completed
	Ohio Oil Co., Vasquez	1	17, 4-17		Grading
	Standard Oil Co., Sepulveda	1	17, 4-17		Grading
	Western Gulf Oil Co., Lechler	2	31, 5-17	7178	Completed
	Yound, Roy W., Inc., Walker	1	11, 4-16	992	Drilling
Coyote—West	Wilshire Annex Oil Co., Comm.	1	14, 3-11	9024	Abandoned
El Segundo	Dominguez Ext. Oil Co., Dominguez-Sunset	1	19, 3-14	7865	Idle
Inglewood	Cliff Baker, Operator, L.A.I.	1	29, 2-14	6555	Idle
Newhall	Barnsdall Oil Co., Limbocker	1	17, 3-16		Grading
	Kenneth Oil Prod. Co., Shepard-Roy	1	34, 4-15	400	Drilling
	St. Anthony Oil Corp., Lassalle	1	10, 3-16	4001	Drilling
	The Texas Co., Whitnah	1	14 3-16	4999	Abandoned
	Tunnel Oil Co., Needham	1	13, 3-16		Rigging up
Palos Verdes	Newton Dev. Co., Palos Verdes	1	13, 5-15	1950	Drilling
	Surety Holding Co.	1	22, 5-14		Rigging up
Puente Hills	Continental Oil Co., Turnbull Comm.	1	13, 2-11	80	Drilling
	Kosanke, J. F., Dragna	1	24, 2-10	1350	Idle
	Sunset Oil Co., Baldwin	1	11, 2-11		Prep. to spud.
Redondo	Jergins Oil Co., Dominguez	1	5, 4-14	3860	Testing
Wilmington-West and North	A. S. Johnston Drlg. Co.	41	29, 4-13	2374	Drilling
	Wilcox, J. F., Timberlake	21	19, 4-13	1855	Redrilling
	San Bernardino County				
Chino	Prado Oil Corp., Lamp	1	32, 2-7	905	Drilling

sec. 34,4-15, the well proposes to make a thorough test of Placerita Canyon possibilities.

On the Needham property near the site of the old Newhall tunnel, Tunnel Oil Co. has contracted with O. E. Criswell to drill a shallow well. Southern California Petroleum Co. has several producers on the property.

Barnsdall Oil Co.'s Honor Rancho No. A 19-1, located a mile northeast of the Castaic Beacon, is coring near the 7600 ft. level but has found little encouragement to date. The Miocene was topped above 6950 ft.

Roy Young's Walker No. 1, in sec. 11,4-16 near Saugus, is drilling below 1150 ft.



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Continental and Sunset Spud Puente Hills Wells

With little more than a mile separating them, two wells are seeking new production in the range of hills between Whittier and Puente. On Anita Baldwin property in sec. 11,2-11, contractor E. A. Bender has just spudded a well for Sunset Oil Co. which will attempt to tap at a structurally higher point the sands from which Shell Oil Co. produced a small qauntity of oil in the early 1920's.

Near the Turnbull Canyon road in sec. 13,2-11, Petex Drilling Co. is drilling a test well for Continental Oil Co.

A. S. Johnston Drills North Wilmington Well

Hoping to prove the existence of real commercial production in the area where Wilmington's first oil was produced ten years ago, A. S. Johnston Drilling Co. is below 3000 ft. in Well No. 41 at the northeast corner of Lomita Blvd. and Fries Ave. The location is near the old Ranger Oil Co. well from which the famous Wilmington horizon takes its name.

J. F. Wilcox's Timberlake No. 1, at the intersection of the Santa Fe railroad and Main St., with bottom at 1850 ft., is sidetracking a drill pipe fish.

West Dominguez Activity Slows

With the completion of most of the inside wells and the abandonment of the two most northerly projects, activity in the west Dominguez extension area is considerably lessened. A damper on further drilling was the failure of Johnson & Richardson's Clemar No. 1 to flow and the comparatively small production obtained by M.P.R. Oil Co. south of Artesia Blvd.

Johnson & Richardson are pumping Clemar No. 1 which is the most westerly to attempt completion. Bottomed at 7250 ft. with casing cemented at 7200 ft., the well produced an estimated 175 bbl. rate initially. M.P.R. Oil Co. No. 1, with casing gun-perforated from 7195 to 7220 ft., came in for about 300 bbls. a day and is now flowing 210 bbls.

West Dominguez Associates Gross No. 1, located between the abandoned Edgemont hole and the discovery well, Grant No. 1, was unable to complete after directionally redrilling to the southeast and was abandoned. Ony hope for continued

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by JOHN CLINTON

Well, now you know the worst. That picture above is John Clinton, himself. And I'll send a fur-lined coffee pot to the reader who guesses closest to what it looks most like! But remember, *I* never said I *was* pretty!

* * *

Also I've changed the name from *"The Spirit of 76"* to *"In Other Words."* The reason is simply that some people thought it had something to do with the history of the Revolutionary War. Regular readers, of course, know that no history is ever written herein!

* * *

"In Other Words" seemed appropriate because in this world, everything has been said before...everything is simply "in other words!" Of course, that applies mostly to *writing*. Lots of *"things"* are *really* new.

* * *

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It has all the fractions you need most—*sudden power* to pass middle-lane loafers, *quick response* to take off from traffic signals, and that special quality of *smooth, economical performance* that in traffic—on the highway—or on the main street—lets you relax while the motor does the work.

* * *

Now if you happen to be an old skeptic, and you have to be *shown* performance before you believe it, I propose a test you can make in your very own automobile this very day. Here's what you do...wait till the tank's almost empty. Then fill 'er up with New 76, and try it for yourself! I believe you'll thank me for the suggestion.

development lies in Lebow-McNee Oil Co.'s Bouska No. 1 west of Main St. which is coring at 7200 ft.

Within the presently defined limits, Dominguez Associates brought in Clark No. 1 for 1400 bbls., Northwest Dominguez Oil Co. finished Gross No. 2 in the 500 bbl. class and Union Oil Co. obtained two good wells on the Austin lease.

Jergins Tests Redondo Well

Jergins Oil Co. is testing Dominguez No. 1 after bottoming at 3860 ft. and cementing 8⅝ in. casing at 3287 ft. The project is located 1800 ft. southeast of Wood - Callahan's recently completed well on the north flank of the Redondo end of the Torrance field.

Fullerton Finishes La Habra Number 8

Fullerton Oil Co. completed La Habra No. 8 as the third producer in the accumulation discovered late last year by La Habra No. 6 in the southeast quarter of sec. 25,2-11, southeast of the old Whittier field. Drilled to 3610 ft., the hole was plugged to 2830 ft. where casing was landed with perforations open in three intervals below 2250 ft. On a short test, production was 60 bbls. a day of 14 gravity oil and 75,000 cu. ft. of gas.

Pittsburgh Equitable Acquires Larsson Machine Tool Works

President W. F. Rockwell of the Pittsburgh Equitable Meter Co. announces that his firm has acquired the assets of the Larsson Machine Tool Works of Berkeley, Calif. This acquisition provides the Pittsburgh firm with a modern self contained tool plant fully equipped to manufacture dies, tools and special equipment. It was stated that the present business would be continued and that these additional facilities would also be utilized for experimental work on a number of new products which are under development.

A diesel-engined cargo liner made the 6,000-mile run from Buenos Aires to New York in 15 days and 15 hours, recently, a record freighter run.

Dear NOMADS, Applicants and Press:

You remember what a success last year's Barbecue was. We promise a better one this year and along with it, on the same day, we will hold the yearly Golf Tournament.

The day—Thursday, August 14th.

FOR THE GOLF TOURNAMENT

The Place—Hacienda Country Club, La Habra. **Time**—From 8:30 a.m. to 6 p.m.

Price—Green Fee $1.50 each. To be paid at the Club on the day of the Tournament. **Prizes**—Yes, plenty and good.

To get to the Hacienda Country Club, drive out Whittier Blvd., five miles beyond Whittier; turn left at big arrow sign marked "Hacienda Country Club" and follow sign to Club.

FOR THE BARBECUE

The Place—Shell Oil Company Barbecue Pit, Brea.

Time—6:30 p.m. **Price**—$1.50 each.

You must get tickets in advance for the Barbecue. Send in your reservations for yourself and guests for both Barbecue and Golf Tournament on enclosed card. Send check to cover Barbecue tickets along with your reservations. Golf fees will be collected at the Hacienda Country Club but we must have reservations in advance.

GUESTS

For Golf Tournament: You pay for both local and foreign guests.

For Barbecue: You pay for local guests—the Club pays for foreign guests. However, you must get tickets and pay in advance for foreign guests when you make reservations. Later put in application for refund on forms which will be furnished you and send these forms to the Treasurer, E. M. Rees, 6000 So. Alameda, and he will remit immediately after the Barbecue. A foreign guest is any man now in California, who is or has been employed by an oil company operating outside of the United States. This definition applies to the yearly Barbecue only.

To get to the Shell Company Barbecue Pit, drive East on Telegraph Road past City of La Habra, approximately three miles; turn left at General Petroleum Pump Station (at sign marked "To Fullerton Oil Co.") and keep to the left on winding road into hills. The Barbecue is approximately one and one-half miles from turn-off. Watch for NOMADS direction sign after turning left at General Petroleum Pump Station.

The Shell Company Barbecue pit is only a few miles from the Hacienda Country Club; about a ten-minute drive.

Be sure to keep this date—**Thursday, August 14th,** open for this big event. Line up both your local and foreign guests now and get your reservations in early.

ROY HITCHCOCK,
Chairman, Barbecue, and Golf Tournament Committees

San Joaquin Valley

Richgrove Area Activity Increases

Three new operators have recently entered the current Richgrove area exploration play. Latest to start is A. E. Dawson, who is drilling well No. 1 at 400 ft. in sec. 3-25-27. Tide Water Associated Oil Co. is grading for Quinn Ranch No. 46 in 8, 25-27 and The Texas Co. is preparing to drill Graham & Loftus No. 77-1 in sec. 1, 24-26 on the Tulare county side of the area. A. J. Borget plans to resume operations in Kendall No. 1, sec. 16, 25-27, which is now idle at 1710 ft.

These wells seek the shallow production suggested by showings found in earlier wells which failed to effect commercial completions.

Work Resumed on Round Mt. Well

Spartan Oil Co. is preparing to sidetrack the drill pipe fish which has long delayed Hiatt No. 1. Located in the northeast quarter of sec. 32,28-29 south of the Round Mountain field, the well was bottomed at 2085 ft. when suspended.

Trico Resumes Gas Development

The long dormant Trico gas field is to become active again when Trico Oil & Gas Co. spuds Seymour-Bolz No. 1 in sec. 20,24-23 in the Tulare county end of the field. Rig is in place but drilling is delayed by flooding from released irrigation waters.

Ohio Completes Coles Levee Well

Latest completion in the continued active Coles Levee field was Ohio Oil Co.'s KCL No. F-17,47-2 in sec. 2,31-25 which finished from 9925 ft. with a potential of 1128 bbls. through a 48/64 in. bean.

While the intense development program which marked the early months of the field's life has considerably slowed, the field is yet moderately active with Richfield Oil Corp. running three strings and Standard Oil, Union Oil and Ohio Oil each operating one.

Work Average Up In Eocene Pools

The sometimes referred to "Twin Pools", Northeast Coalinga field and East Coalinga Eocene Pool field are maintaining a high development average with 11 strings of tools currently at work. With the drilling of new wells, the fields are becoming more closely connected by a narrow "neck" of production and are showing signs of living up to the heretofore inaccurate twin description. Combined, the Eocene production has been given a potential of 744,712 bbls. per day exceeding that of the state's largest producer, Wilmington, by 15,024 bbls.

Devils Den Area Becoming Active

A development program aimed at supplying adequate lube oil stocks for a small lubricating oil refinery now building in the area is under way at Devils Den.

Latest to start is a project by Miesse & McCabe, Jacquelyn No. 1, in the southwest quarter of sec. 26,25-18 on the old Dudley Oil Co.'s holdings. E. A. Moyes of Bakersfield has contracted to drill with a portable rig. According to R. S.

SAN JOAQUIN VALLEY WILDCATS

Area	Well	No.	Section	Depth	Status
	Fresno County				
Cantua Creek	Seaboard Oil Corp., Hagood	2	6, 17-13	1991	Drilling
Friant	Gay, D. M.	1	3, 11-21	75	Idle
Jacalitos Hills	Wilshire Annex Oil Co.	33-26E	26, 21-15		Grading
Panoche Creek	Richfield Oil Corp., Stone-Bragg	1	33, 13-12		Location
Raisin City	Gen. Pet. Corp., Burrel	1	2, 17-18	6259	Drilling
	Shell Oil Co., S.A. & F.L. Land	1-19	19, 15-18	5049	Trying to comp.
	Kern County				
Belridge—South	Section 27 Oil Co., Aslin	1	27, 28-22	210	Rigging up
	Sentinel Oil Co.	1	10, 28-20	3902	Idle
Buttonwillow	The Texas Co., S. P.	47-15	15, 28-24	12138	Testing uphole
Devils Den	Herzog, R. D., Le Baron	5	24, 25-18	146	Drilling
	Herzog, R. D., Marine	30	26, 25-18	215	Completing
	Herzog, R. D., McKay	1	26, 25-18	453	Rig gas lift
	Herzog, R. D. Marine	B-1	26 25-18	705	Reaming
	Miesse & McCabe Jacquelyn	1	26 25-18		Location
Grapevine	Kern Line Oil Co.	1	19, 11-19	8390	Idle
	Richfield Oil Corp., Tejon	2	19, 11-18	4966	Drilling
Greeley—West	Superior Oil Co., KCL	13	18, 29-25	11817	Drilling
Lost Hills	Tide Water Assoc. Oil Co., Isolis	46	16, 27-21	6279	Drilling
McClung	Macrate, A. N., Haberfelde	1	32, 29-26		Rig
	Ohio Oil Co., KCL	G-1	36, 29-26	9985	Drilling
Mountain View	Richfield Oil Corp., West Mt. View	1	16, 30-28		Location
Paloma	Union Oil Co., Morgan	81	14, 32-26	1290	Drilling
Richgrove	Borget, A. J., Kendall	1	16, 25-27	1710	Idle
	Dawson, A. E.	1	3, 25-27	390	Drilling
	Tide Water Assoc. Oil Co., Quinn	46	8, 25-27		Grading
	The Texas Co., G & L	77-1	1, 24-26		Grade
Round Mt.	Spartan Oil Co., Hiatt	1	32, 28-29	2085	Sidetracking
Shafter	Continental Oil Co., KCL	C-2	35, 27-24	11349	Redrilling
Union Avenue	Hancock Oil Co., Watts	1	8, 30-28		Location
	Kings County				
Kettleman So. Dome	Bristol Oil Co., Smith	1	35, 24-19	8054	Idle
Pyramid Hills	Phillips Oil Prod. Co.	1	13, 24-18		Foundation
	Pyramid Prod. Co., Spreckles	2	16, 24-18	1321	Drilling
Reef Ridge	Blair Oil Co., Blair	2	24, 23-16		Spudding in
	Easterbrooks, S. F.	1	11, 23-26	715	Idle
	Tulare County				
Trico	Trico Oil & Gas Co., Seymour-Bolz	1	20, 24-23		Rig

Miesse, partner in the venture, it is planned to continuously core the hole for a thorough knowledge of all possible sands.

The new project offsets Raymond D. Herzog's 453 ft. McKay No. 1, now experimenting with gas-lift. Mr. Herzog has several shallow wells at varying points of development. His Marine No. 29 in sec. 26,25-18 was finished for a small amount of the 21 plus gravity lube stock from 182 ft.

Richfield Quits Tejon Ranch "Cat"

Richfied Oil Corp.'s Tejon No. 2 in sec. 19,11-18 at the westerly line of the Tejon Ranch was abandoned at 4966 ft. in Schist found at 4943 ft. The Basalt found in the Grapevine Pool, 4 miles to the southwest, was encountered in the interval 3625 to 4560 ft. This is the second exploration hole which Richfield has drilled on its large holdings in the area.

In the center of sec. 19,11-19 Kern Line Oil Co.'s 8390 ft. well No. 1 is trying other intervals after tests at 7550-7565 ft. and 7170-7190 ft. recovered gas, water and a little 45 gravity oil.

Belridge Well Rigging Rotary

Section 27 Oil Co.'s Aslin No. 1 in sec. 27,28-22 is rigging rotary equipment to resume after reaching 210 ft. with cable tools.

In sec. 10,28-20, Sentinel Oil Co. is idle at 3902 ft. Operators are reported planning to resample the walls to again look at several sand bodies which showed possibilities.

In the center of the Belridge proved field, Belridge Oil Co.'s well No. 55-26, sec. 26,27-20, is reported in what may be hard gray Eocene sand at 9695 ft. topped at approximately 9545 ft.

This well is seeking production below existing commercial levels and little information has been released concerning its findings.

Macrate Plans McClung Well

A mile and a half south of the Greeley field in sec. 32,29-26, A. N. Macrate has built rig for Haberfelde No. 1 to seek production indicated by prior Stevens zone and Vedder zone showings in other wells in the area. Contract for the actual drilling has been let to the Taft Well Drilling Co.

Ohio Oil Co.'s KCL No. G-1, four miles to the east, is drilling at 9985 ft. with no showings of exceptional interest reported to date. A 14 ft. interval at 5177 ft. netted a little salt water with a fair gas blow.

North Dome Well Deep in Section

Standard Oil Co.'s well No. 1-1U, most southerly well in the Kettleman North Dome field, is drilling in hard sandy shale showing lots of gas at 12,725 ft. Far and away the deepest well in the field, the try found many intervals barren on tests

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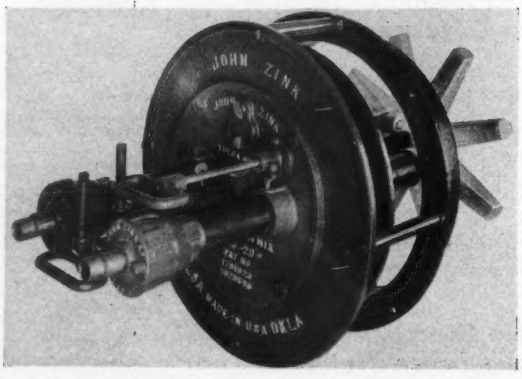

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down to and including the top of the McAdams, or Eocene producing sand, at nearly 11,000 ft.

Sands showing fair to light cuts have been encountered at intervals below 11,900 ft. which have not yet been tested. Gas and oil were reported on the ditch at 12,500 ft. so it may be possible that an even deeper producing zone may yet be uncovered in this north Valley field. In any event the south tip of the field is getting a real test.

Hancock, Richfield Plan Wildcat Wells

In line with the current wildcatting program the south section of the San Joaquin Valley, the area lying between the northwest tip of the Mountain View field and the recently discovered Union Avenue production is to be represented by two wells. Nearest to the Union Avenue pool is Hancock Oil Co.'s Watts No. 1, located in the center of sec. 8, 30-28. The well is Hancock's second project in the area since it discovered the production in section 6.

To the southeast near the Mountain View field is Richfield Oil Corp.'s West Mountain View No. 1 in the southeast quarter of sec. 16,30-28. This well will be drilled on contract by Pike Drilling Co.

Long suspected of probable additional production, the area is geologically complex due to multiple faulting.

Richfield Plans Panoche Creek Try

Richfield Oil Corp. has staked location for Stone-Bragg No. 1 as a test of the Eocene and Cretaceous ages in the northwest quarter of sec. 33, 13-12, a little more than 16 miles west of the city of Mendota in Fresno county. The location is about six miles northwest of the wells drilled by Jergins Oil Co. which produced small amounts of gas, salt water and distillate from the Cretaceous at approximately 7200 ft.

Standard Completing Greeley Flank Well

Standard Oil Co. is swabbing KCL No. 12-14 at the northeasterly flank of the Greeley field. Located in sec. 7,29-27 the well bottomed in gray oil sand at 11,510 ft. after finding the Rio Bravo at 11,422 ft. and the Vedder at 11,482 ft.

Liner including 30 ft. of perforations was landed at 11,509 ft. for the production test.

Union Oil Spuds Paloma Outpost

Union Oil Co.'s attempt to extend Paloma production a mile to the south was officially begun when Morgan No. 81 was spudded on July 14th. Located in the northeast corner of sec. 14, 32-26, the well alone is active in the field although Western Gulf, General Petroleum and Ohio Oil are all reported planning to start soon.

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Trans-Oceanic Plans Another Mesa Project

Trans-Oceanic Oil Corp. has derrick erected for M'divani No. 8 in the easterly section of the Santa Barbara Mesa field. The drilling contract is said to have been let to E. A. Bender.

Point Arena Well Gets Oil Showings

According to late advices received from San Francisco, the N. F. Keyt well, located on Point Arena, Mendocino county, is coring below 1050 ft. in shale with occasional streaks of sand showing oil. The project seeks production in an oil sand which outcrops in the bluff overlooking the ocean a short distance to the west.

Shell Oil Planning Alameda County Test

Shell Oil Co. has surveyed a location for Nissen No. 1 which will seek both oil and gas in sec. 7, 2s-3e near Altamont in Alameda county. Drilling is expected to get under way in the next few weeks.

Fairfield Pumps Bardsdale Well

Freeman E. Fairfield, Long Beach operator and supply dealer, has Fairfield-Filmore No. 1 on the pump after several weeks of grief. First few hours rate was estimated at 125 bbls. a day of 30 gravity oil cutting 6.0 per cent and the operator was hopeful that the hole would not sand up as in previous trials. The well is open from 1070 ft. to bottom at 3473 ft.

San Marino Oil Co.'s Capitol Crude No. 1, located in sec. 7, 3-19, is repairing drilling equipment with bottom at 1868 ft. Considerable gas was reported at 1560 ft.

Hopland Oil Co. is preparing to drill ahead after a short period of idleness at 2923 ft. The well is located in sec. 1, 3-19.

Palma Oil Co. is reported to be ready to continue the drilling of its Elkins No. 1 in sec. 8, 3-19 which was temporarily shut down a few weeks ago.

Santa Maria Valley Yields Big Completions

Reminiscent of the boom days of the field were recent completions at Santa Maria Valley by Union Oil Co. and the Bush-Hancock combination. The former company finished Mahoney No. 4, its fourth new well cornering on the center of sec. 24,10-34, flowing 1625 bbls. of 16.5 gravity clean oil from 434 ft. of formation open to bottom at 2700 ft. Union has been setting some speed records in this area, requiring only nine days on this project, which set 11¾ in. surface casing at 713 ft. and a 5½ in. combination string on bottom. The Franciscan was entered at 2660 ft.

In sec. 25, 10-34, joint operators R. R. Bush Oil Co. and Hancock Oil Co., bottomed Hopkins No. 5 at 4655 ft. and completed with initial production estimated at 2000 bbls. a day. An 8⅝ in. water string was cemented at 3786 ft. and a perforated liner run to bottom. Contractor Kern Drilling Co. has moved equipment to Rosenblum No. 5 in the same section.

Pacific Western Oil Corp. finished

COASTAL COUNTIES WILDCATS

Area	Well	No.	Section	Depth	Status
	Santa Barbara County				
Cat Canyon	Alphonzo E. Bell Corp., Gilmore	1	23. 9-33		Rig
	O. C. Field Gasoline Co., Palmer Stendel	24–1	24, 9-33	2613	Drilling
Lompoc	O. C. Field Gasoline Co., Carreaga	1	31, 8-33		Grade
Summerland	Stokes, L. E., Glenray	1	1, 4-26	285	Idle
	San Luis Obispo County				
Huasna	Tex Harvey Oil Corp., Gilmore Comm.	2	11, 32-14	3445	No report
	Ventura County				
Bardsdale	Cook, Osmere, King	1	33, 4-19	125	Drilling
	Hopland Oil Co.	1	1, 3-19	2923	Drilling
	Palma Oil Co.	1	8, 3-19	2865	Idle
	San Marino Oil Co., Capitol Crude	1	7, 3-19	1868	Drilling
	San Marino Oil Co., Capitol Crude	2	7, 3-19		Location
Conejo	Sycamore Oil Co., Boylan	1	23, 1-20		Rig
Ojai	Oil Prod. Maintenance, Inc. Byhara	1	12, 4-22	620	Rig Rotary
Piru	Havlin & Pottenger, Alice	1	33, 4-18	1715	Idle
Sespe	Inter Counties Fuel Co.	1A	22, 4-19	1120	Drilling
	McCaslin, W. E., Burson	1	19, 4-19	2000	Cleaning out
South Mountain	Comstock Pet. Co.	1	17, 3-29	2165	Reaming
	Loose, E. H. & Dietzmann, J.	1	17, 3-20		Rigging up
	South Mountain Oil Co.	1	10 3-20	2750	Cleaning out
Timber Canyon	Crude Oils Inc., West	1	19, 4-20	833	Drilling

NORTHERN COUNTIES WILDCATS

County	Well	No.	Section	Depth	Status
Alameda	Shell Oil Co., Nissen	1	7, 2s-3e		Grade
Colusa	Pacific National Pet. Corp.	1	17, 17n-4w		Rig
Glenn	Holly Sugar Co.	1	32, 22n-1w	4349	Drilling
Madera	Shell Oil Co., Chowchilla Farms	74–9	9, 11s-14e		Grade
Mendocino	Keyt, N. F.	1	3, 12n-17w	987	Drilling
Monterey	Loma Grande Oil Co., Corey	1	23, 24s-10e	3695	Fishing D. P.
Sacramento	Amerada Pet. Corp. F & C	1	4, 6n-3e	4246	Drilling
	Standard Oil Co., Prod. Prpties	1	23, 3n-3e		Grade
San Joaquin	Standard Oil Co., Blewett	3	23, 3s-6e		No report
	Standard Oil Co., Mabry	2	31, 2n-5e		Boilers
Solano	Standard Oil Co., Suisun Comm.	1	36, 4n-2w	1388	Drilling
Yolo	Standard Oil Co., Tippetts	1–1	15, 12n-3w		Location
Yuba	Wright, L. G., Cox	1	18, 14n-5e	1795	Idle

Carranza No. 1, sec. 28,10-34, in the interval 4368-4567 ft. and is moving the drilling rig to another location. Signal Oil & Gas Co.'s Newlove No. 4 in sec. 26 is also on production but no estimates have been received.

Still by far the most extensive operator in the field, Union Oil Co. is working on six projects, two of which are drilling. Recent completions by the company include Nicolai No. 3, sec. 28, for 700 bbls. and Moretti No. 1-4, sec. 24, for 693 bbls.

Bel-Air Oil Co.'s Twitchell No. 1, sec. 35,10-34, is running casing after logging the base of the Sisquoc at 4835 ft.

Union Builds Orcutt Derrick

Planning to proceed immediately with Squires No. 23, Union Oil Co. has a derrick built on the location staked two months ago in sec. 26, 9-34 in the old Santa Maria-Orcutt field. Following this, Union will drill another new well on the Dome lease.

Independents Finish Ventura Avenue Wells

British American Oil Producing Co. brought in Hartmann No. 12 at Ventura Avenue flowing initially through a 16/64 in. bean at the rate of 239 bbls. a day of 31.4 gravity oil cutting 3.0%. Gas production was metered at 144,000 cu. ft. Bottomed at 9180 ft., the hole was finished with 8⅝ in. casing cemented at 8815 ft. and a perforated liner in the open interval.

Alliance Petroleum Corp., pioneer operator of the north-central area, finished Hisey No. 4 at 9266 ft. but production figures were not available at press time. Location has been surveyed for Hisey No. 5.

In the same sector, Bolsa Chica Oil Corp.'s Bolsa No. 7-A is preparing to drill ahead from 6900 ft. after recovering a drill-collar fish and General Petroleum Corp. Barnard No. 20 is making hole below 5600 ft.

Tide Water Associated Oil Co.'s latest completion, Lloyd No. 106, came in as a gasser making only 65 bbls. of oil along with more than 6,000,000 cu. ft. of gas. The hole was bottomed at 7420 ft. with perforations open below 7015 ft.

Gen. Pet. Plugs Capitan Producer

General Petroleum Corp. obtained an initial yield of 450 bbls. a day after plugging back Erburu No. 12 at Capitan and recompleting in the Vaqueros zone. Formerly producing from the Sespe at 2579 ft., the well was bridged with cement at 1578 ft. and perforated from 1275 to 1355 ft. resulting in the new production of 19 gravity oil.

Standard Tests Los Flores No. 2

Standard Oil Co., determined to learn all there is to know on the way down, is testing Los Flores No. 2 with a drill stem tester every 100 ft. Located north of Cat Canyon's two deep Monterey zone producers, the well encountered the Chert lower than expected and is virtually a wildcat. Only indifferent results have been obtained on several trials from the Chert top at 5960 ft. to last reported bottom at 6250 ft.

Some distance to the south and in a proved location, Standard Oil Co. is planning to drill Los Flores No. 3 to the same zone. Both wells are in sec. 27,9-33.

On the Gilmore lease at the north end of the old Cat Canyon field, Alphonzo E. Bell Corp. has derrick erected ready to move in equipment now being used on a well at Santa Maria Valley.

O. C. Field Gasoline Corp. Palmer-Stendel No. 1 is coring for oil sands in the Sisquoc at approximately 3000 ft.

O. C. Field Plans New Lompoc Test

The O. C. Field Gasoline Corp., for many years interested in the coastal areas, is preparing to drill an extension test near the east end of the old Lompoc field.

How Leading Firms Reduce Compensation Insurance Costs:

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(Continued from Page 6)

board Oil Company, Los Angeles, Calif.

A. S. Russell, Vice-President, Standard Oil Company of California, San Francisco, California.

A. C. Rubel, Vice-President, Union Oil Company of California, Los Angeles, California.

R. L. Minckler, Director, General Petroleum Corporation, Los Angeles, Calif.

Harold Pauley, Vice-President, The Petrol Corporation, 950 South Broadway, Los Angeles, California.

Torrey H. Webb, Vice-President and General Manager, The Texas Company (California) 929 South Broadway, Los Angeles, California.

R. D. Mathews, President, Pacific States Oil Company, 530 West 6th Street, Los Angeles, California.

D. F. Gerstenberger, General Manager, Inland Empire Refineries, Spokane Washington.

A. C. Saul, Assistant to Vice-President, Shell Oil Company, Inc., San Francisco, California.

Marketing Committee

C. S. Beesemyer, Chairman, Vice-President, Gilmore Oil Company, 2423 East 28th Street, Los Angeles, California.

O. W. March, Vice-President, Signal Oil Company, 811 West 7th Street, Los Angeles, California.

J. H. MacGaregill, Director, Standard Oil Company of California, San Francisco, California.

H. D. Maxwell, Maxwell Petroleum Corporation, Tacoma, Washington.

W. T. Dinkins, Vice-President, Richfield Oil Corporation, 555 South Flower Street, Los Angeles, California.

L. G. McLaren, Vice-President, Shell Oil Company, Shell Building, San Francisco, California.

P. E. Allan, General Sales Manager, Tide Water Associated Oil Company, 79 New Montgomery Street, San Francisco, California.

B. E. Devere, Executive Vice-President, Pathfinder Petroleum Company, Los Angeles, California.

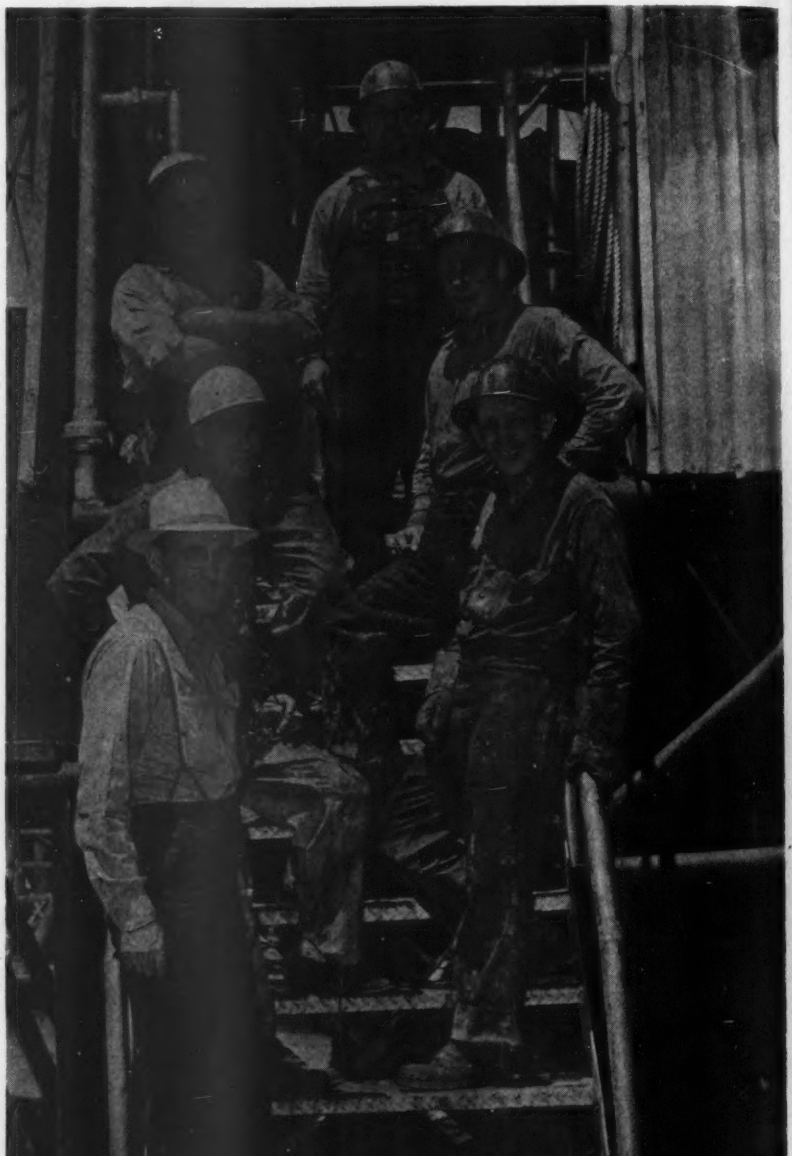
Dewitt Knox,Vice-President, Macmillan Petroleum Corporation, Los Angeles, California.

Walter H. Nielsen, Dealer, 3436 West 1st Street, Los Angeles, California.

West Del Valle Development Starts

Preliminary work is already under way for three offsets to Jasper Petroleum Co.'s Videgain No. 1 which came in early this month to prove up the West Del Valle area. On the west, Bankline Oil Co. has foundation in for Videgain No. 101, while on the south Ohio Oil Co. is grading roads for Vasquez No. 1 and on the east Standard Oil Co. is preparing a location for Sepulveda No. 1. Because more operators are involved, it is quite likely that activity here will soon surpass that in Del Valle proper where R. E. Havenstrite is the sole holder of proved acreage.

Completed in the Modelo interval 5883-5994 ft. for 450 bbls. of 31.5 gravity oil through a 26/64 in. bean, the discovery well is now pinched back to 240 bbls. by a 9/64 in. bean. The cut, consisting of 6% emulsion and 2% water, has not entirely cleaned up and the operators are uncertain as to its source.



At Shell's A3-29 in Ten Section the crew was caught returning to work. They are: L. A. Ebaugh, B. D. Looney, G. E. Ingraham, Barney McBeattie, L. E. Glines, I. M. Hudson.

Install W. C. Dayhuff C. N. G. A. President

New Committee Heads Named

With a unanimous vote of thanks to Retiring President L. V. Cassaday and the committeemen who worked with him during the past year, the board of directors of California Natural Gasoline Association met recently for the purpose of installing W. C. Dayhuff, Standard Oil Co. of California, as president of the association for 1941-42 and to hear reports of work accomplished during the past year as well as to formulate plans for the ensuing term.

Mr. Dayhuff, in his inaugural speech pledged continuance of the association's activities with particular reference to the work of its General Technical Committee and the various sub-committees which make up that body for the purpose of more efficiently dealing with the various technical problems of the industry.

The directors heard a report of the work of these committees in which it was pointed out that many problems are receiving the attention of the various sub-committees while it was pointed out that during the year just closed several valuable contributions to the industry's technical advance were made through the completion and publication of two bulletins. These were "Physical Constants of the Components of Natural Gas and Gasoline"

C. N. G. A. retiring president (left) L. V. Cassaday, Lomita Gasoline Company, presenting gavel to incoming President W. C. Dayhuff, Standard Oil Co. of Calif.

C. N. G. A. annual directors' dinner and meeting: Head table, left to right: F. E. Davie, Shell Oil Co., Inc.; C. D. Gard, Union Oil Co. of Calif.; W. W. Robinson, The Texas Co., Vice-president, C. N. G. A.; G. L. Tyler, Secretary, C. N. G. A.; L. V. Cassaday, Lomita Gasoline Company; W. C. Dayhuff, Standard Oil Co. of Calif., President, C. N. G. A.; R. W. Heath, Signal Oil & Gas Co.; W. H. Kraft, Honolulu Oil Corp. Ltd.; F. J. Colton, Tide Water Associated Oil Co.; Wm. Moeller, Southern Calif. Gas Co.; John H. Kunkel, Public Relations Counsel, Chairman, Publicity Committee. Foreground table, left to right: R. S. Tulin, Shell Oil Co., Inc., Fane H. Krebs, Lomita-Signal-Wilmington Associates, Chairman, Auditing Committee; L. L. Bendinger, Lomita Gasoline Company, Chairman, Membership Committee; H. A. Dresser, The Fluor Corp. Ltd., Chairman, Entertainment Committee; D. E. McFadden, Union Oil Co. of Calif., Chairman, Program Committee; G. C. McLaren, Standard Oil Co. of Calif.; P. S. Magruder, General Petroleum Corp.; J. C. Burks, O. C. Field Gasoline Corp.; R. D. Gibbs, Union Oil Co. of Calif.; H. R. Linhoff, Richfield Oil Corp.; Foreground table, Right to left: S. F. Magor, Superior Oil Company; H. M. Paulsen, Bankline-Norwalk Co.; J. B. Taylor, Signal Oil & Gas Co., Chairman, Technical Committee; M. W. Kibre, General Petroleum Corp., Chairman, Fall Meeting Committee; M. M. McMahon, Southern Calif. Gas Co., Chairman Taft Chapter; H. R. Eggleston, Gilmore Oil Co.; H. E. Moulton, C. C. M. O. Co.; J. C. Gilbert, Barnsdall Oil Co.; R. C. Wheeler, General Petroleum Corp.; J. S. Fluor, Jr., The Fluor Corporation, Limited.

C.N.G.A. Committee Chairmen, 1941-42: Front row, left to right: L. L. Bendinger, Lomita Gasoline Company, Membership Committee; M. W. Kibre, General Petroleum Corp., Fall Meeting Committee; Fane H. Krebs, Lomita-Signal-Wilmington Associates, Auditing Committee; H. A. Dresser, The Fluor Corp. Ltd., Entertainment Committee. Back row, left to right: W. W. Robinson, The Texas Company, Advisory Committee; J. B. Taylor, Signal Oil & Gas Co., Technical Committee; D. E. McFaddin, Union Oil Co. of Calif., Program Committee; R. D. Gibbs, Union Oil Co. of Calif., Gas Report Committee; J. H. Kunkel, Public Relations Counsel, Publicity Committee.

and "Tentative Standard Procedure for the Determination of the Corrected Hourly Gas Coefficient (C^1) Used in the Measurement of Natural Gas by Orifice Meter." This latter bulletin is the result of joint committee work between C.N.G.A. and committees of the Pacific Coast Gas Association and the Southern California Meter Association.

J. B. Taylor, Signal Oil and Gas Co., newly appointed General Technical Committee chairman, stated that the several sub-committees would continue their work on the various problems under consideration and that prominent in the technical committee's activities for 1941-42 will be the publication of bulletins on fractional analysis of natural gas and gasoline, gas engine and compressor operation and truck gauging. The committee will also be concerned with writing a text book on natural gasoline plant operation and the indexing of proceedings and papers presented by various authors who have appeared before the membership during the association's fifteen years of activity.

New committee chairmen, beside Mr. Taylor, include W. W. Robinson, Jr., The Texas Co., advisory; T. L. Taggart, Standard Oil Co. of Calif., finance and budget; Fane H. Krebs, Lomita-Signal-Wilmington Associates, auditing; D. E. McFaddin, Union Oil Co. of Calif. program; John H. Kunkel, public relations counsel, publicity; Harold A. Dresser, Fluor Corp., entertainment; R. D. Gibbs, Union Oil Co. of Calif., gas report; M. W. Kibre, General Petroleum Corp., fall meeting; and L. L. Bendinger, Lomita Gasoline Co., membership.

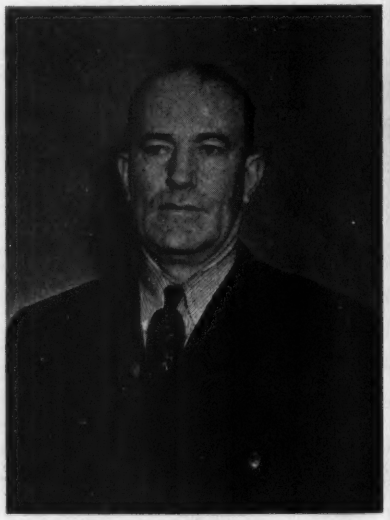
E. E. Pyles Appointed Production Chairman

E. E. Pyles, Vice-President of the Hancock Oil Co. who has been appointed chairman of the Production Committee of District No. 5 by Oil Coordinator Harold L. Ickes under the National Defense Organization of the oil industry, started in the oil business in California in 1910, as a young man of sixteen, having come to California in 1906 from his birthplace in Texas.

His first California oil field employment was as a roustabout in the Taft area of Kern County, and during the years from 1910 to 1913 he was a gang pusher and tool dresser there for General Petroleum Corporation, Honolulu Oil Corporation, and North American Oil Consolidated. In 1913 he was sent to South America by the Barber Asphalt Company after which he returned to California for a short period and then went to Texas and Oklahoma as superintendent for Panhandle Producing and Refining Company.

In 1916 he was employed by the Shell Oil Co. in Coalinga, leaving to go overseas with the 26th Engineers. After the close of World War No. 1, he returned to California and was a driller on the second well on Signal Hill, Booth No. 1 of the Martinez Oil Co., following which he joined the Bush-Voorhis Oil Company, as head of the land and lease department. In 1927, he joined The Hancock Oil Company in the land lease department, became a Director of that Company in 1935 and Vice-President in charge of production in 1936, which position he now holds. In addition, Mr. Pyles is also a vice-president and director of the Southwest Exploration Company, with production at Huntington Beach, and is chairman of the operating board and director of the Long Beach Oil and Development Company, with properties in the Wilmington-Long Beach Harbor area.

Mr. Pyles is a director of the Independent Petroleum Association of America, the California Petroleum Safety Board, and was chairman of the Emergency Executive Committee of California Oil Operators which was active in

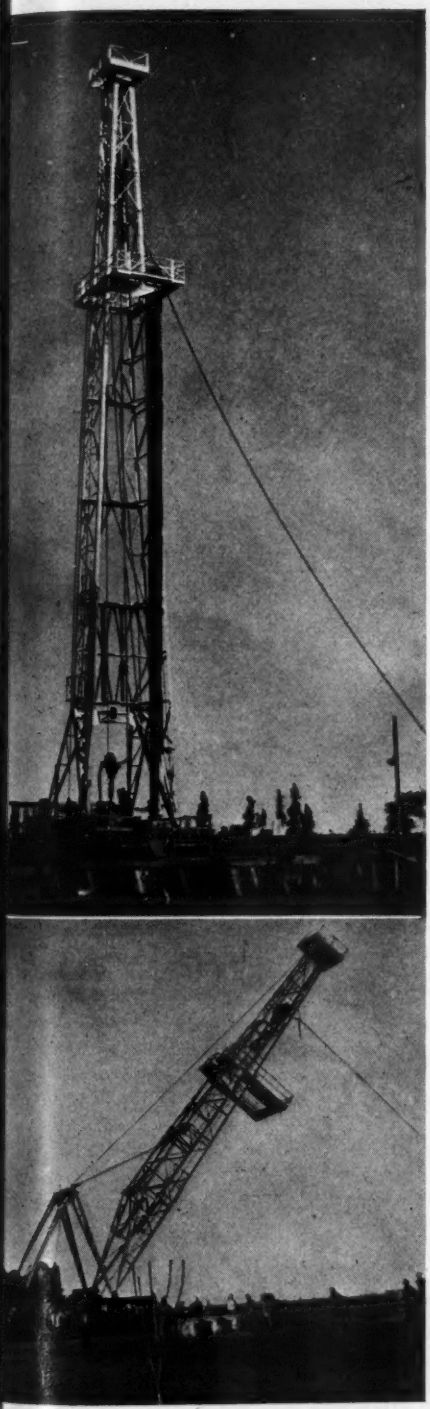


E. E. Pyles

curtailment efforts during the latter part of 1939 and early 1940. He is a past member of the Conservation Committee of California Oil Producers and was a member of the Administrative Sub-Committee of that body. He is also a member of the Signal Hill Oil Operators Committee.

Ideco Makes and Sells Moore Cantilever Drilling Mast

International Derrick and Equipment Co. of California announces an exclusive manufacturing and sales agreement for the Pacific Coast for the Patented Lee C. Moore Portable Cantilever Drilling Mast.



Above: 126-foot cantilever mast drilling near Rio Vista. Below: 94-foot cantilever drilling mast being erected near Rio Vista.

Three of these masts in 94 ft. and 126 ft. heights are already in use in the Rio Vista Gas fields where their portability has proven its advantages to California operators. The simple assembly and erection which is performed by the drilling crew is one of the outstanding features of this latest type high speed modern rig.

The Patented Cantilever Mast as illustrated has been termed one of the most important developments in drilling equipment in years—a self-supporting mast that completely serves the purpose of a standard drilling derrick and incorporates a base for mounting the mast, draw works, rotary table and power the makers say. The latest designs are complete in such detail that it requires only three to five hours to erect the complete rig ready for drilling, with all of the work being done by the drilling crew aided by a winch truck. On short moves, the entire rig is conveniently skidded without dismanteling; or on a long move the prefabricated sections are readily moved on conventional oilfield trucking equipment without special permits.

The Crown Block, Racking Platform and Ladder are an integral part of the Mast. The Crown Block is built into the top section of the Mast, and is moved and raised attached. The Racking Platform is hinged to the side of the mast, folding up for transporting. The ladder is permanently attached to each section, and is hinged to nest against the sections for easy handling. The working space of both the Racking Platform and rig floors have been well planned to speed up drilling operations.

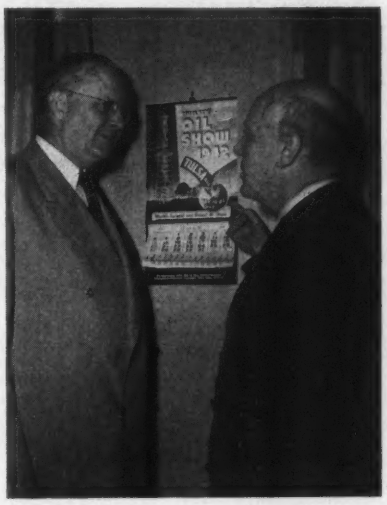
Apparent economies include the low cost of erection, dismanteling and moving not only the Mast, but the remainder of the drilling outfit.

Detailed information on these masts can be procured through any IDECO of California sales office.

Axelson Picnic Has Record Crowd

Nearly three thousand employees, their families and friends attended the Twelfth Annual Picnic of the Axelson Manufacturing Co.'s Employees Welfare Association held July 12 at the Barney Oldfield Picnic Ground near Van Nuys, Calif.

Under the direction of Alvin "Dutch" Zwerniman, general chairman, a fast-moving program of games and entertainment for young and old got under way by nine in the morning. After lunch a baseball game between the Shop and the Office kept the crowd enthralled. The music of a good dance orchestra held most of the guests until nearly midnight. The committee reported this year's picnic to be the largest and best attended to date.

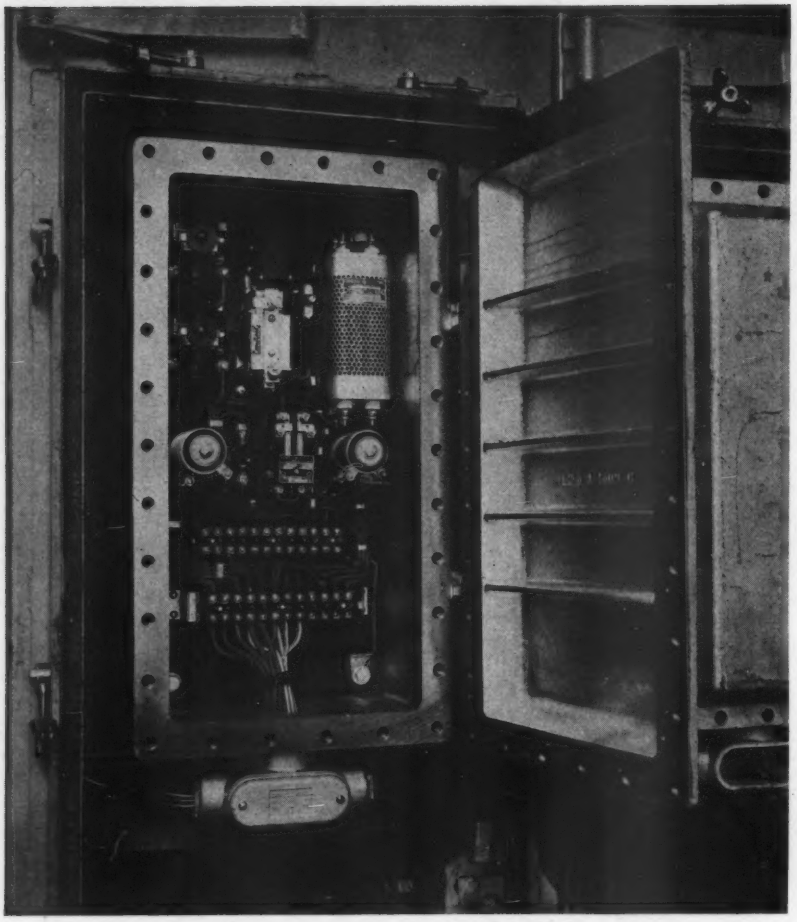


Signalizing the signing of the 100th space contract for the May 16 to 23, 1942 International Petroleum Exposition by the Bethlehem Supply Corp., Vice President G. A. Tompson, left, of Bethlehem, discussed exhibits and features of the "World's Fair of the Petroleum Industry" with General Manager Wm. B. Way. Mr. Way pointed out that the signing of the 100th contract by Bethlehem Supply sets a record for early contracts. Aug. 15 has been set as a deadline for 1940 exhibitors to exercise their options on their old exhibit space for the 1942 show.

Petroleum Coordinator's Probable Staff Reported

While there has been no announcement yet from the oil coordinator's office as to staff appointments, Washington reports indicate that among Deputy Oil Coordinator Davies' advisors will be: for production, Robert E. Allen, formerly assistant oil umpire of California; refining, Wright Gary, M. W. Kellogg Company, New York refinery licensing and construction company; transportation, E. B. Swanson, associate director of the Interior Department's petroleum conservation division and formerly chief petroleum economist of the U. S. Bureau of Mines; and, marketing, Dr. John W. Frey, associate director of the petroleum conservation division. It is reported that George W. Holland, director of the petroleum conservation division, probably will continue in that position but advise with Ickes and Davies on matters affecting relations with the interstate oil compact, oil-state regulatory agencies, and on large-scale production problems.

Rapid construction and flexibility feature the first Portuguese oil refinery, now on stream.



Control equipment in explosion proof box.

Metal-Clad Switchgear For Oil Refineries

Metal-clad switchgear specially designed for locations where the gear may be subject to corrosive and hazardous atmospheres is announced by the General Electric Co. This vertical-lift-type switchgear is available in ratings up to and including 15,000 volts with breaker ratings as high as 500,000 kva to control incoming lines, feeders and motors. The equipment is for either indoor or outdoor installation.

The new equipment has all of the advantages of G-E standard metal-clad switchgear in general industrial service, plus a number of special features to meet the requirements of the industry.

Its removable front and rear panels are fitted against a neoprene-covered felt gasket retained in a protecting channel. The gasket combines the compression qualities of felt with the gas-resisting qualities of neoprene.

Junctions between floor plate, side sheets, and top cover are sealed with compound retained in built-in channels. Construction of the complete housing is as an individual unit, facilitating addition of circuit units.

The secondary control devices are mounted within each enclosure in a separate explosion-proof box. This consists of a heavy, reinforced cast box sealed to insure complete protection of the operating equipment.

The oil circuit breaker in the equipment can be raised or lowered to the connected or disconnected position without opening the front door. A window in the door allows the operator to determine visually the position of the circuit breaker. An interlocking arrangement prevents lowering or raising a closed circuit breaker.

External surfaces of the equipment have a special corrosion-resistant finish and the inner surface of the roof and side sheets are lined with pulverized cork to prevent troublesome condensation.

Royalty Service Tests Long Beach Outpost

Testing up hole by stages from bottom at 9070 ft., Royalty Service Corp. Burgess No. 1 has found very little encouragement so far. Trials of two intervals below 8500 ft. recovered a small amount of wet fluid. Next the company proposes to try from 6650 to 6750 ft. The well is located on the north flank of the Long Beach field east of Orange Ave.

In the northwest extension area, Hilldon Oil Co. redrilled Flood Control No. 2 to 5441 ft. and recompleted pumping 135 bbls. a day of 25 gravity clean oil. The company is now preparing to deepen Amebco No. 1, the well which discovered the fault play four years ago.

R. Allen Brown's Nedal No. 3, bottomed at 7042 ft., is cleaning out after pumping an estimated 50 bbls. a day cutting 50%.

On the north slope of Signal Hill proper, Shell Oil Co. is completing Hamilton No. 5-A in formations open at intervals from 3750 ft. to plugged bottom at 4650 ft.

Oil and the Farmer

The oil industry, strange as it may seem, is one of the farmer's best and most reliable customers.

You probably don't know it—but much of the grease that lubricates America's car's and other machines contains tallow oil, which, in turn, comes from sheep. About 107,000,000 pounds of tallow oil in one form or another are consumed annually by the petroleum industry. That requires 35,000,000 sheep.

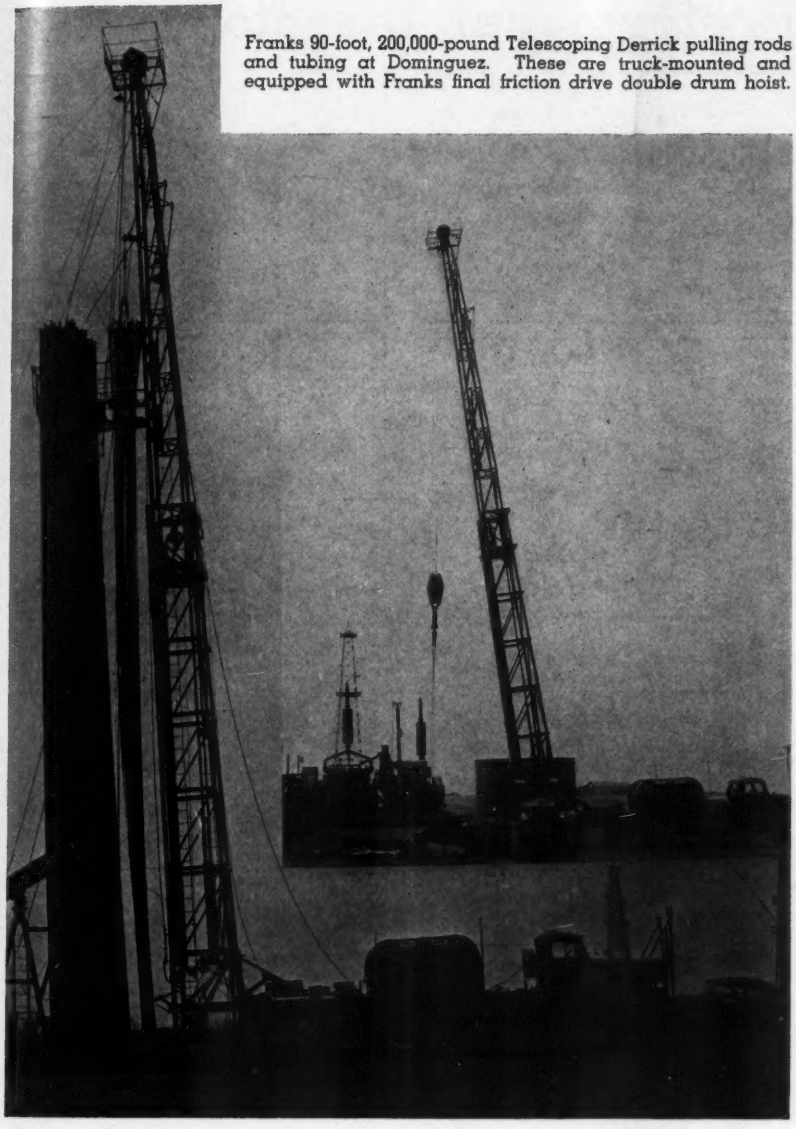
This is just one item in the long list of supplies the oil industry buys each year directly from agriculture. To it must be added lard oil from pigs, stearine from cattle and horses, castor oil from the castor plant, neat's-foot oil made from horns and hooves, milk, fiberboard, hair felt, leather, cotton fabrics, wood products—and dozens of others.

The petroleum industry's consumption of farm products grows steadily, as production of oil and lubricants increases, and as new techniques and processes are developed. And millions of dollars thus find their way into the farmers' pockets.

So, in a very real sense, the corner service station is a distributor of farm crops! And the oil industry is one of agriculture's biggest cash customers.

Illinois Passes Conservation Bill

Final legislative action has been completed on the first oil regulatory law ever passed in Illinois and the measure has been sent to Governor Green for consideration. The action by the Legislature followed a meeting between Secretary Ickes and 7 Illinois State Senators on June 12 when, it was reported, Ickes told the Senators that **oil states must enact suitable oil conservation laws or the Federal Government would.**



Franks 90-foot, 200,000-pound Telescoping Derrick pulling rods and tubing at Dominguez. These are truck-mounted and equipped with Franks final friction drive double drum hoist.

Nomads Given Air Raid Description

Phil McConnell of Bahrein Petroleum Co. who has recently returned from Bahrein Island was the main speaker at the regular monthly meeting of the Los Angeles Chapter of Nomads held at the University Club in Los Angeles July 9. Except for the induction of new regular and associate members the entire meeting following the dinner was devoted to an address on the Near East and to motion pictures furnished by the U. S. Army and shown by Sgt. J. P. Bargman.

The native life on Bahrein Island and the adjacent mainland was vividly described by Mr. McConnell who has spent a number of years in that territory. He was at the company camp and near the refinery when the Italians bombed that area and was able to witness the whole performance at close quarters. Between 90 and 100 bombs were dropped during the raid but he said that no damage was done except to two barbed wire fences.

Following Mr. McConnell's most interesting talk two motion pictures with sound were shown. The first was "The Army on Wheels" and the second, in technicolor, was "Wings of Steel."

Other men from oil companies outside the United States present were R. B. Block of the International Petroleum Co. from Ecuador; Clint Adams of the U.B.-O.T. from Trinidad; A. W. Rothrock of the Colombian Petroleum Co from Colombia; Carlos Ripamonte of the Y.P.F. from Argentina; and C. A. Ricks of the Caribbean Petroleum from Maracaibo, Venezuela.

In publicity released covering the June 18 meeting of the Los Angeles Chapter of Nomads, one of the new associate members elected was John B. Isaacs of Hughes Tool Company. This name was erroneously given as "John P. Isaacs of Reed Roller Bit Co."

H. J. Wilson Named Head Fire Prevention Committee

H. J. Wilson, Tide Water Associated Oil Co., **San Francisco,** has been appointed chairman of the 1941 Committee on Fire Prevention of the American Petroleum Institute's Division of Marketing. D. V. Stroop, American Petroleum Institute, New York, is secretary.

Members of the committee, appointed by E. V. Weber, chairman of the division's General Committee, are: Donald A. Bering, Shell Oil Co., Inc., **San Francisco;** R. W. Black, Standard Oil Co. of N. J., Elizabeth, N. J.; J. H. Brown, Tide Water Associated Oil Co., New York; F. A. Epps, Spartan Oil Co., Dover, N. J.; O. H. Gundlach, Sinclair Refining Co.; New York; H. H. Hall, Standard Oil Co. of California, **San Francisco;** Stanley Hargen, Socony-Vacuum Oil Co, Inc., New York; Frank Harrison, The Pure Oil Co., Chicago; R. T. Henderson, The Standard Oil Co. (Ohio), Cleveland; J. H. Hutchinson, Cushing Refining & Gasoline Co., Cushing, Okla.; A. L. Knipping, Jr., General Petroleum Corp., **Los Angeles;** Earl L. Kullmann, Socony-Vacuum Oil Co., Inc., Wadhams Division, Milwaukee; F. R. McLean, Socony-Vacuum Oil Co. (White Star-Ohio Division), Detroit; Thos. Montgomery, Imperial Oil, Ltd., Sarnia, Ontario; J. Howard Myers, The Atlantic Refining Co., Philadelphia; J. E. Niland, Humble Oil & Refining Co., Houston; C. D. Norris, The Texas Co., New York; George F. Prussing, Union Oil Co. of California, **Los Angeles;** C. W. Smith, Standard Oil Co. (Indiana), Chicago; H. Emerson Thomas, Phillips Petroleum Co., New York; C. E. Townsend, Sun Oil Co., Philadelphia; and A. H. Vineyard, Shell Oil Co., Inc., New York.

East Coyote Well Pumps 650 Bbls. Daily

Bartholomae Oil Corp. completed Stern No. 10 at 6840 ft. in the East Coyote deep zone pumping at the rate of 650 bbls. a day of 26 gravity oil. Formations are open below 5500 ft.

Standard Oil Co. completed Emery No. 71 at West Coyote for 550 bbls. a day.

Two hundred and fifty thousand new chemical compounds and 10,000 new metal alloys have been discovered within the last few years.

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Oil Men's Calendar

Calif. Natural Gasoline Association. **Los Angeles Chapter**—Meets 1st Thursday Each Month, Barker Bros. Bldg., Los Angeles—Dinner at 6:00 (Optional). **Taft Chapter**—Meets Third Thursday Each Month.

American Society of Mechanical Engineers—Los Angeles Section—Meets 2nd Thursday Each Month—Barker Bros. Bldg., Los Angeles. Dinner at 6:30 (Optional).

August

19-21—National Association of Petroleum Retailers, Chicago, Ill.

September

8-12—American Chemical Society, Chalfonte-Haddon Hall, Atlantic City, N. J.

17-19—National Petroleum Assn., 39th Annual Meeting, Hotel Traymore, Atlantic City.

25-26—Society of Automotive Engineers, National Tractor Meeting, Schroeder Hotel, Milwaukee, Wis.

29-30—National Lubricating Grease Institute, Ninth Annual Meeting, Stevens Hotel, Chicago, Ill.

October

6-8—Twenty-eighth National Foreign Trade Convention, Hotel Pennsylvania, New York.

6-9—National Safety Congress, Stevens Hotel, Chicago, Ill.

16-17—American Association of Petroleum Geologists, Pacific Section, Ambassador Hotel, **Los Angeles, Calif.**

16-18—American Institute of Mining & Metallurgical Engineers, Petroleum Division, Dallas, Tex.

20-22—Independent Pet. Assn. of America, 12th Annual Meeting, Tulsa, Okla.

30-31—American Institute of Mining & Metallurgical Engineers, Petroleum Division, **Los Angeles, Calif.**

30-Nov. 1—Society of Automotive Engineers, National Aircraft Production Meeting, Biltmore Hotel, **Los Angeles, Calif.**

31—California Natural Gasoline Assn., **Los Angeles, Calif.**

November

3-7—American Petroleum Institute, 22nd Annual Meeting, St. Francis and Palace Hotels, **San Francisco, Calif.**

December

3—New Mexico Oil & Gas Assn., Artesia, New Mexico.

Stripper Well Group Gives Production Data

Recognition of the important part to be played in the national defense program by the smaller oil well operators of California was evidenced in the decision made recently by Leon Henderson not to force a reduction of crude oil prices in California. The decision of the chief of the Office of Price Administration and Civilian Supply followed the presentation by the California Stripper Well Association of a voluminous report to governmental price officials last week in which the trade group urged that present crude oil prices be maintained.

"In the report we filed with the Henderson office," declared Richard Fenton, executive vice-president of the trade association, "we included the first study ever made of the tremendous amount of oil reserves behind the stripper wells of this state. Our calculations, made on the basis of accepted government engineering practice, showed that the 11,500 stripper wells in California had a total oil reserve of over 244,000,000 barrels.

"These great reserves were pointed out by us as being of extreme value to this country in times of national emergency and we requested the Office of Price Administration and Civilian Supply not to reduce the selling price of crude oil. It is our belief that any cut in the price of crude oil in California at this time might lead to abandonment of hundreds of these stripper wells and the consequent loss of their recoverable reserves. Our opinion was amply supported by an exhaustive report on all wells in the state that are in the stripper well class and apparently was given careful study by governmental officials before making their decision to leave the present prices stand."